

**Algebra I Lesson #3 Unit 9**  
**Class Worksheet #3**  
**For Worksheets #3 & #4**

## **Algebra I Class Worksheet #3 Unit 9 Solutions**

Solve each of the following systems of equations using the **multiplication-addition method**.

1. 
$$\begin{aligned} 5x + 3y &= 29 \\ x - 3y &= -5 \end{aligned}$$

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

To solve for x, we must eliminate the y terms.

1. 
$$5x + 3y = 29$$
$$x - 3y = -5$$

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1. 
$$5x + 3y = 29$$
$$x - 3y = -5$$


To solve for x, we must eliminate the y terms.

Bring down the top equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.  $5x + 3y = 29$   
 $x - 3y = -5$




$5x + 3y = 29$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1. 
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
  

$$5x + 3y = 29$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.  $5x + 3y = 29$   
 $x - 3y = -5$

$5x + 3y = 29$   
 $x - 3y = -5$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1. 
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
  
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1. 
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
  
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1. 
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
  
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} \color{red}{\boxed{\phantom{5x + 3y = 29}}} \\ \color{blue}{\boxed{\phantom{x - 3y = -5}}} \\ \color{red}{\phantom{5x + 3y = 29}} \\ \color{blue}{\phantom{x - 3y = -5}} \\ \hline 6x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

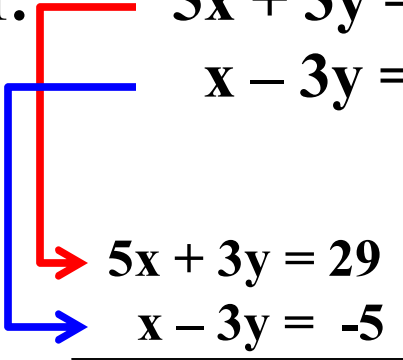
Notice that the  $y$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} \color{red}{\boxed{\phantom{00}}} \color{red}{5x + 3y = 29} \\ \color{blue}{\boxed{\phantom{00}}} \phantom{5x + 3y} = -5 \\ \hline \color{red}{\rightarrow} 5x + 3y = 29 \\ \color{blue}{\rightarrow} \phantom{5x + 3y} = -5 \\ \hline 6x = 24 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} \color{red}{\boxed{\phantom{5x + 3y = 29}}} \\ \color{blue}{\boxed{\phantom{x - 3y = -5}}} \\ \color{red}{\phantom{5x + 3y = 29}} \\ \color{blue}{\phantom{x - 3y = -5}} \\ \hline 6x = 24 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} \color{red}{\left. \begin{array}{l} 5x + 3y = 29 \\ x - 3y = -5 \end{array} \right\}} \\ \color{blue}{\left. \begin{array}{l} 5x + 3y = 29 \\ x - 3y = -5 \end{array} \right\}} \\ \hline 6x = 24 \\ x = 4 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.



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$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

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To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

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To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

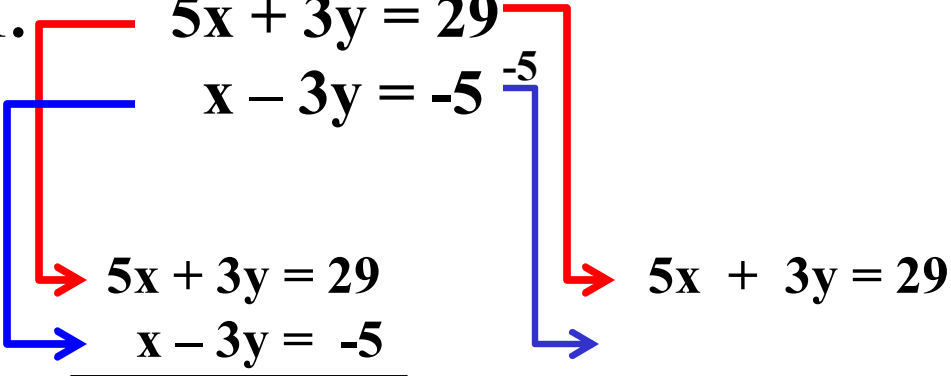
Multiply both sides of the bottom equation by  $-5$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



---

$$6x = 24$$
$$x = 4$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

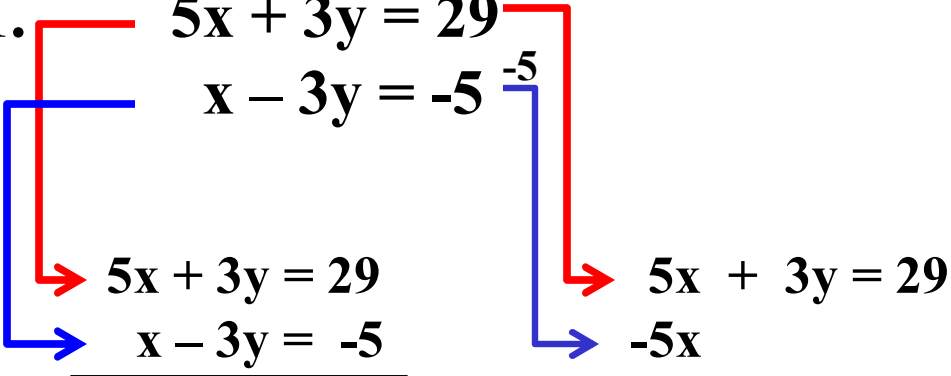
Multiply both sides of the bottom equation by -5.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



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$$6x = 24$$
$$x = 4$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

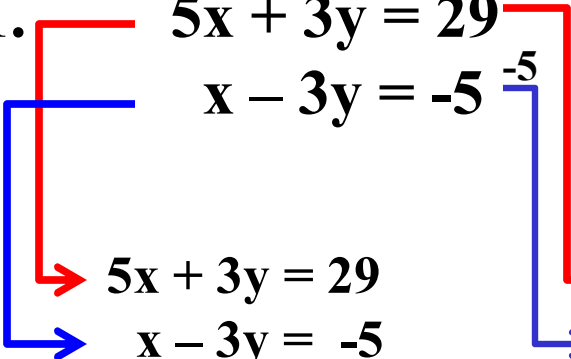
Multiply both sides of the bottom equation by -5.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = -25 \\ \hline 18y = 4 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$

*(Diagram: A red bracket groups the top equation. A blue bracket groups the bottom equation. A red arrow points from the top equation to the right-hand side of the second system. A blue arrow points from the bottom equation to the right-hand side of the second system. A '-5' is written above the bottom equation in the second system, indicating multiplication.)*

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

Notice that the x terms are opposite.

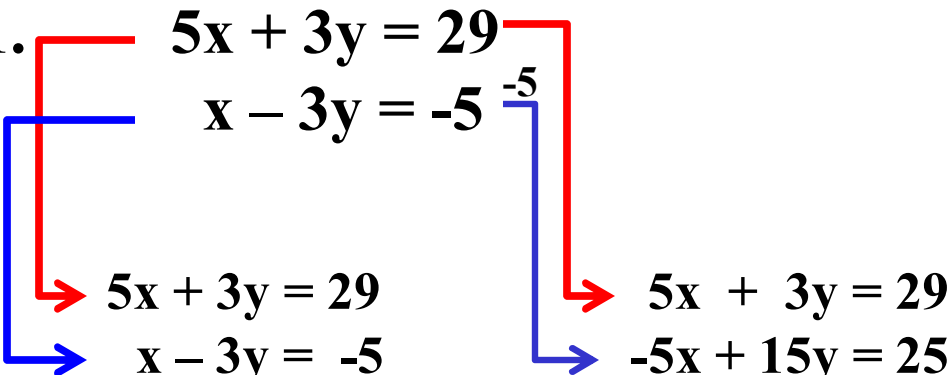


# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$

---

$$6x = 24$$
$$x = 4$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

Notice that the x terms are opposite.

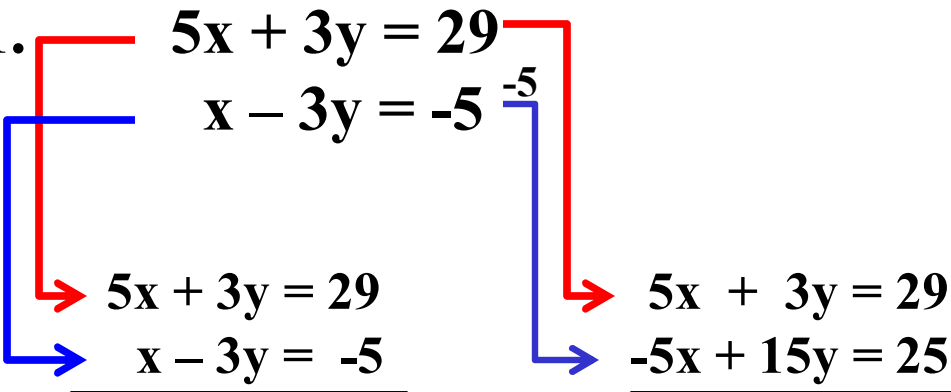
Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \\ \hline 18y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $x$  terms are opposite.

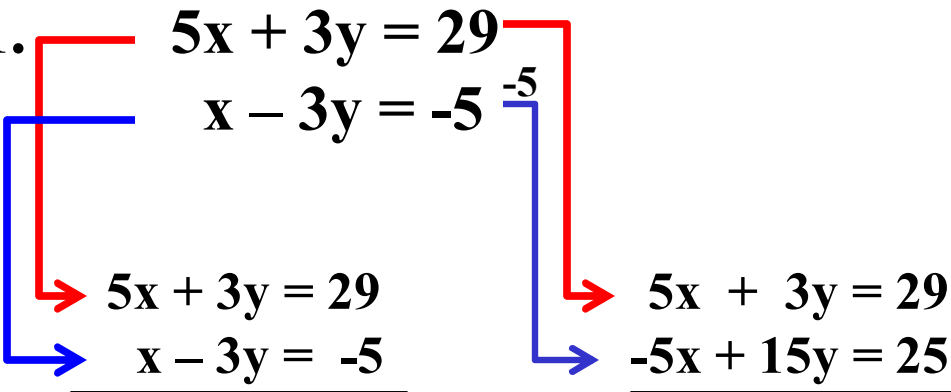
Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \\ \hline 18y = \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

Notice that the x terms are opposite.

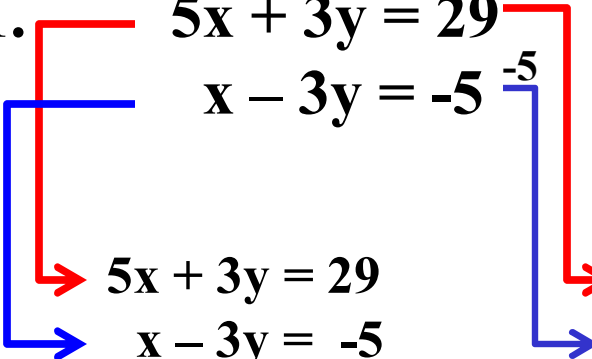
Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \\ \hline 18y = 54 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $x$  terms are opposite.

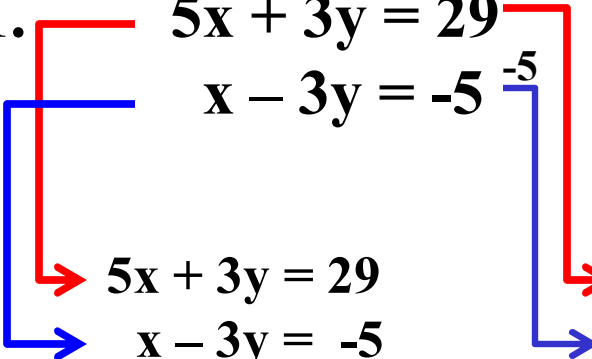
Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \\ \hline 18y = 54 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

Notice that the x terms are opposite.

Add the equations.

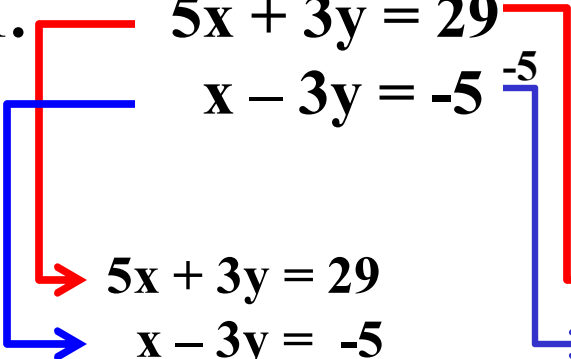
Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \\ \hline 18y = 54 \\ y = 3 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

Notice that the x terms are opposite.

Add the equations.

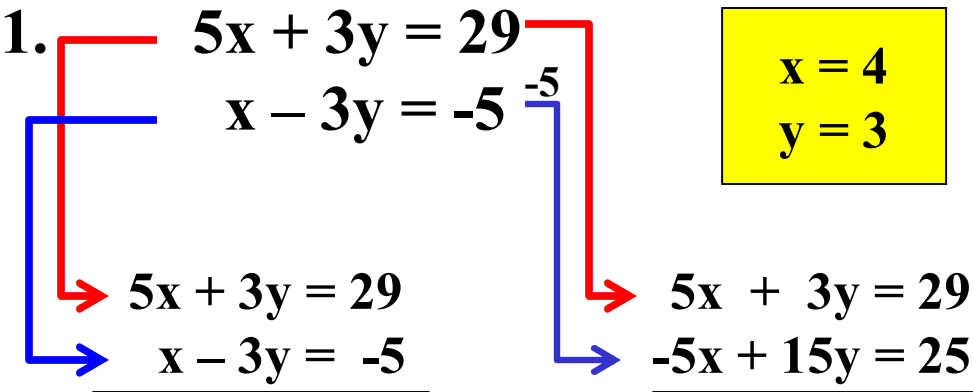
Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

1.

$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \end{array}$$



$$\begin{array}{r} 5x + 3y = 29 \\ x - 3y = -5 \\ \hline 6x = 24 \\ x = 4 \end{array}$$
$$\begin{array}{r} 5x + 3y = 29 \\ -5x + 15y = 25 \\ \hline 18y = 54 \\ y = 3 \end{array}$$

**$x = 4$**   
 **$y = 3$**

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -5.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.



## **Algebra I Class Worksheet #3 Unit 9 Solutions**

Solve each of the following systems of equations using the **multiplication-addition method**.

**2.**       $4x + 5y = 10$   
          $2x - y = 12$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.  $4x + 5y = 10$   
 $2x - y = 12$

To solve for  $x$ , we must eliminate the  $y$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.


2.  $4x + 5y = 10$   
 $2x - y = 12$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.


2.  
$$\begin{array}{l} 4x + 5y = 10 \\ 2x - y = 12 \\ 4x + 5y = 10 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.   $4x + 5y = 10$   
 $2x - y = 12$   
 $4x + 5y = 10$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2. 
$$\begin{array}{l} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$
  
$$4x + 5y = 10$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$4x + 5y = 10$$

10x

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{l} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$
$$\begin{array}{l} 4x + 5y = 10 \\ 10x - 5y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{l} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$
$$\begin{array}{l} 4x + 5y = 10 \\ 10x - 5y = 60 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{l} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$
$$\begin{array}{l} 4x + 5y = 10 \\ 10x - 5y = 60 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \end{array}$$

---

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

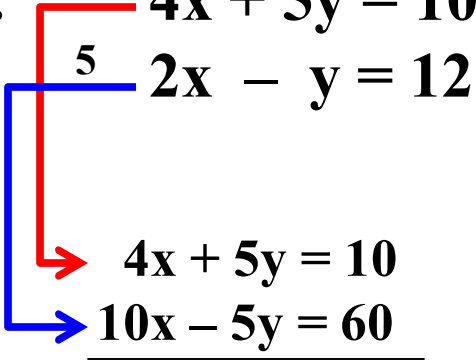
# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

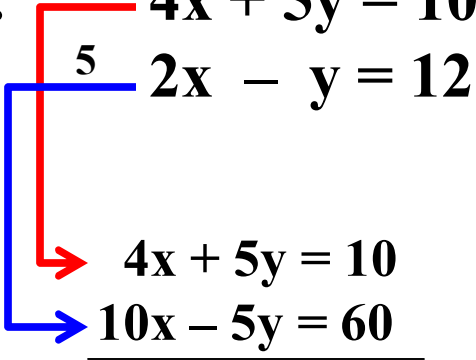
## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

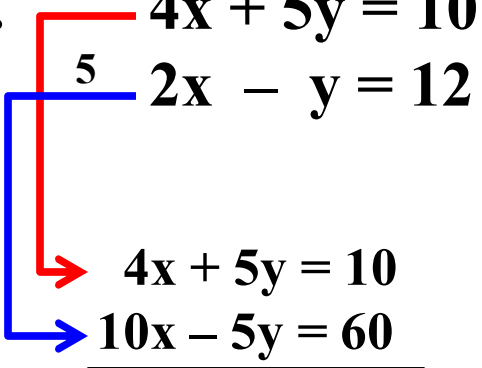
Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$



$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

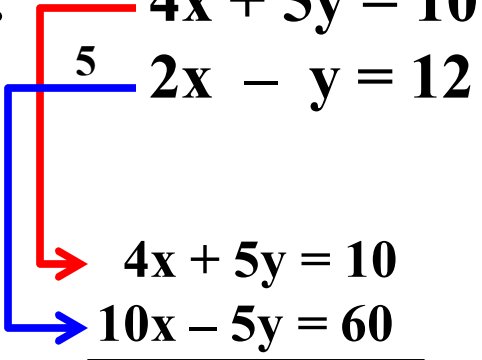


## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$



$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

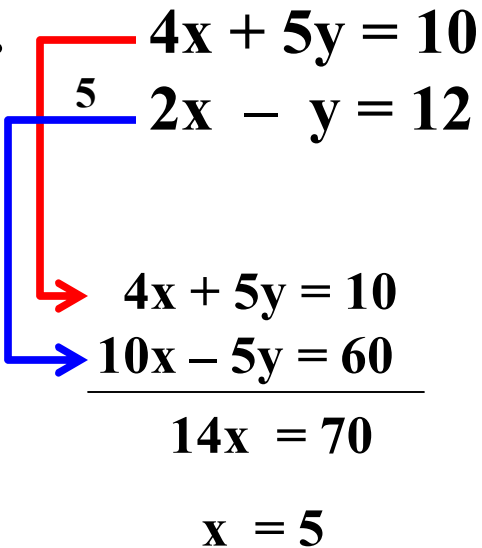
To solve for  $y$ , we must eliminate the  $x$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$



$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

$4x + 5y = 10$

$4x + 5y = 10$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

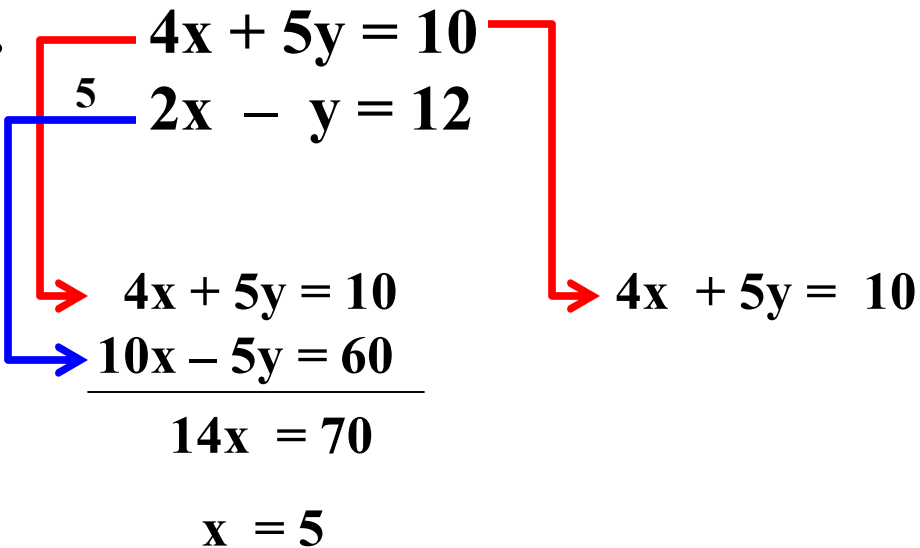
2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

$4x + 5y = 10$



To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the top equation to the bottom equation, indicating multiplication by 5.
- A blue arrow labeled "-2" points from the bottom equation to the top equation, indicating multiplication by -2.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

Diagram illustrating the elimination of the y term:

$$\begin{array}{r} 4x + 5y = 10 \\ -4x \phantom{+ 5y} = -20 \\ \hline 0x + 0y = -10 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

5

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$

-2

$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 10 in the first equation.
- A red arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 4 in the second equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 12 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \\ \hline 7y \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \\ \hline 7y = -14 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \\ \hline 7y = -14 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 2 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \\ \hline 7y = -14 \\ y = -2 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

2.

$$\begin{array}{r} 4x + 5y = 10 \\ 2x - y = 12 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 4 in the first equation.
- A blue arrow labeled "5" points from the coefficient 2 in the second equation to the coefficient 10 in the first equation.
- A red arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 4 in the second equation.
- A blue arrow labeled "-2" points from the coefficient 4 in the first equation to the coefficient 10 in the second equation.

$$\begin{array}{r} 4x + 5y = 10 \\ 10x - 5y = 60 \\ \hline 14x = 70 \\ x = 5 \end{array}$$
$$\begin{array}{r} 4x + 5y = 10 \\ -4x + 2y = -24 \\ \hline 7y = -14 \\ y = -2 \end{array}$$

$$\begin{array}{l} x = 5 \\ y = -2 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.



## **Algebra I Class Worksheet #3 Unit 9 Solutions**

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$6x + 5y = 13$$
$$3x - 2y = -16$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

To solve for  $x$ , we must eliminate the  $y$  terms.

3. 
$$6x + 5y = 13$$
$$3x - 2y = -16$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$6x + 5y = 13$$
$$3x - 2y = -16$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array}$$




To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array}$$



$12x$

To solve for  $x$ , we must eliminate the  $y$  terms.


Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array}$$

$$12x + 10y$$



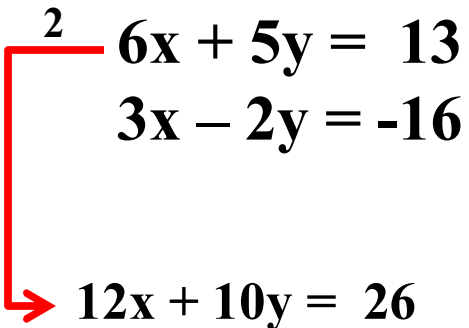
To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array}$$
  
$$\rightarrow 12x + 10y = 26$$

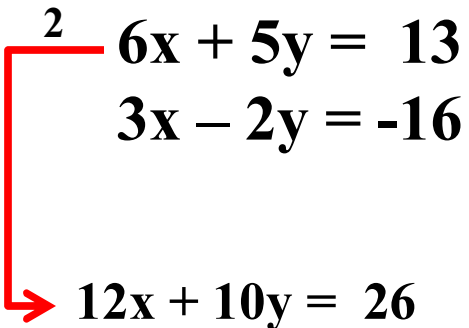


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array}$$
  
$$12x + 10y = 26$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

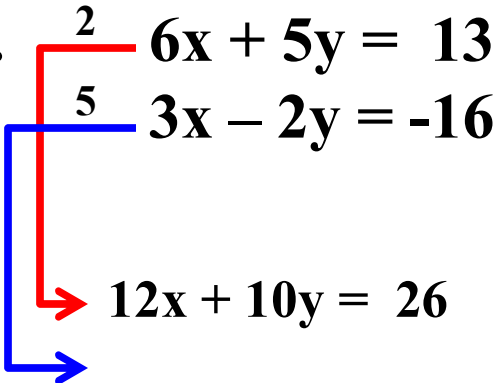
Multiply both sides of the bottom equation by 5.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} 2 \cdot (6x + 5y = 13) \\ 5 \cdot (3x - 2y = -16) \\ \hline 12x + 10y = 26 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \\ \hline \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3. 
$$\begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \\ \hline \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \\ \hline \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \\ \hline \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \\ \hline 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \\ \hline 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \\ \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \hline \begin{array}{l} \xrightarrow{\text{red}} \\ \xrightarrow{\text{blue}} \end{array} \\ \begin{array}{l} 12x + 10y = 26 \\ 15x - 10y = -80 \end{array} \\ \hline 27x = -54 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 3. \quad \begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \\ \hline 27x = -54 \end{array} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 3. \quad \begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \end{array} \\ \hline 27x = -54 \\ x = -2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \\ \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \hline \begin{array}{l} \xrightarrow{\text{red}} \\ \xrightarrow{\text{blue}} \end{array} \\ \begin{array}{l} 12x + 10y = 26 \\ 15x - 10y = -80 \end{array} \\ \hline 27x = -54 \\ x = -2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \\ \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \hline \begin{array}{l} \xrightarrow{\text{red}} \\ \xrightarrow{\text{blue}} \end{array} \\ \begin{array}{l} 12x + 10y = 26 \\ 15x - 10y = -80 \end{array} \\ \hline 27x = -54 \\ x = -2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} 2 \\ 5 \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array}$$
$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$6x + 5y = 13$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 12x + 10y = 26 \\ 15x - 10y = -80 \end{array} \\ \hline 27x = -54 \\ x = -2 \end{array}$$

$6x + 5y = 13$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

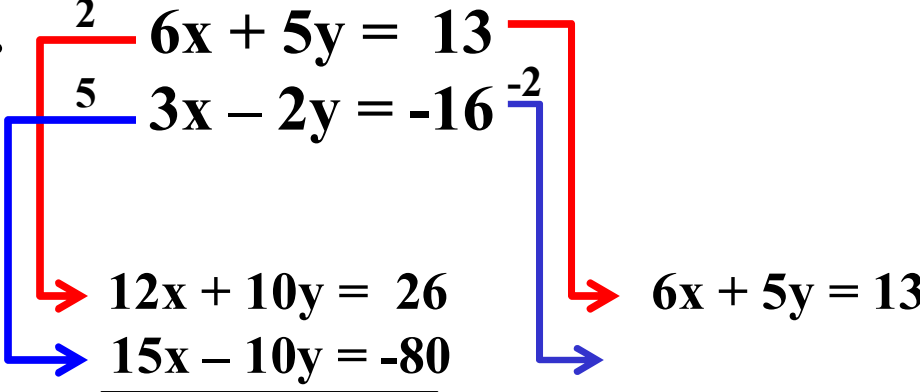
# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array} \end{array}$$

$6x + 5y = 13$



To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} 2 \\ 5 \\ \hline 6x + 5y = 13 \\ 3x - 2y = -16 \end{array}$$
$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$\begin{array}{r} -2 \\ \hline 6x + 5y = 13 \\ -6x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array} \end{array}$$
$$\begin{array}{l} \xrightarrow{-2} 6x + 5y = 13 \\ \xrightarrow{-2} -6x + 4y \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$\begin{array}{r} 6x + 5y = 13 \\ -6x + 4y = 32 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array} \end{array}$$
$$\begin{array}{l} \xrightarrow{-2} 6x + 5y = 13 \\ \xrightarrow{-2} -6x + 4y = 32 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$\begin{array}{r} 6x + 5y = 13 \\ -6x + 4y = 32 \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \end{array}$$
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$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$\begin{array}{r} 6x + 5y = 13 \\ -6x + 4y = 32 \\ \hline 9y \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite. Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{5} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$\begin{array}{r} 6x + 5y = 13 \\ -6x + 4y = 32 \\ \hline 9y = 45 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite. Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$\begin{array}{r} 6x + 5y = 13 \\ -6x + 4y = 32 \\ \hline 9y = 45 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite. Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} 6x + 5y = 13 \\ \xrightarrow{5} 3x - 2y = -16 \end{array} \\ \hline \begin{array}{l} \xrightarrow{2} 12x + 10y = 26 \\ \xrightarrow{5} 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{-2} 6x + 5y = 13 \\ \xrightarrow{-2} 3x - 2y = -16 \end{array} \\ \hline \begin{array}{l} \xrightarrow{-2} 6x + 5y = 13 \\ \xrightarrow{-2} -6x + 4y = 32 \\ \hline 9y = 45 \\ y = 5 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

3.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-2} \end{array} \end{array}$$

$$\begin{array}{l} x = -2 \\ y = 5 \end{array}$$

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{5} \end{array} \begin{array}{l} 6x + 5y = 13 \\ 3x - 2y = -16 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-2} \end{array} \end{array}$$
$$\begin{array}{r} 12x + 10y = 26 \\ 15x - 10y = -80 \\ \hline 27x = -54 \\ x = -2 \end{array}$$
$$\begin{array}{r} 6x + 5y = 13 \\ -6x + 4y = 32 \\ \hline 9y = 45 \\ y = 5 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 5.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite. Add the equations.

Now, solve for y.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{aligned} 4x + y &= 3 \\ 3x - 2y &= 16 \end{aligned}$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{aligned} 4x + y &= 3 \\ 3x - 2y &= 16 \end{aligned}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$4x + y = 3$$
$$3x - 2y = 16$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

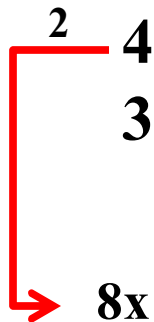
Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{array}{r} 2 \\ \hline 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$8x$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{array}{r} 2 \\ \hline 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{array}{r} 2 \\ \rightarrow \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \rightarrow \\ 8x + 2y = 6 \end{array}$$

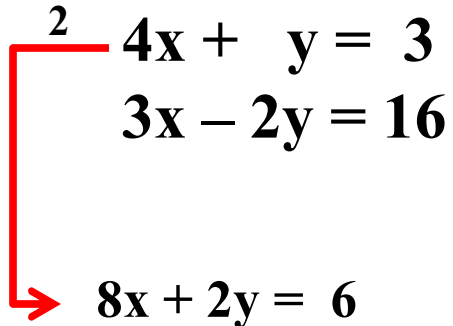
To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{array}{r} 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$
  
$$8x + 2y = 6$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$
  
$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4. 
$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

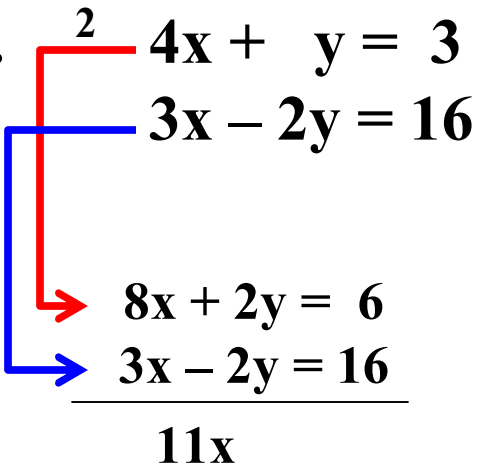
Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \\ \hline 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

$\xrightarrow{3}$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{3}$   $12x$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{3}$   $12x + 3y$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{3}$   $12x + 3y = 9$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{3}$   $12x + 3y = 9$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{-4}$   $12x + 3y = 9$

---

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{-4}$   $12x + 3y = 9$

$\xrightarrow{-4}$   $-12x$

---

$$11x = 22$$
$$x = 2$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{-4}$   $-12x + 8y = 9$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array} \quad \begin{array}{r} 3 \\ -4 \\ 12x + 3y = 9 \\ -12x + 8y = -64 \end{array}$$
  
$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by  $-4$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \phantom{00} \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{-4}$   $-12x + 8y = -64$

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array} \quad \begin{array}{r} 3 \\ 3 \\ -4 \\ 12x + 3y = 9 \\ -12x + 8y = -64 \end{array}$$
  
$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$
  
$$\begin{array}{r} 12x + 3y = 9 \\ -12x + 8y = -64 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by  $-4$ .

Notice that the  $x$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \quad 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$

$\xrightarrow{2}$   $8x + 2y = 6$

$\xrightarrow{-4}$   $-12x + 8y = -64$

---

$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$

---

$$\begin{array}{r} 3 \quad 4x + y = 3 \\ -4 \quad 3x - 2y = 16 \end{array}$$

$\xrightarrow{3}$   $12x + 3y = 9$

$\xrightarrow{-4}$   $-12x + 8y = -64$

---

$$\begin{array}{r} 12x + 3y = 9 \\ -12x + 8y = -64 \\ \hline 11y \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} \overset{2}{\color{red}\curvearrowright} \quad 4x + y = 3 \quad \overset{3}{\color{red}\curvearrowright} \\ \color{blue}\curvearrowright \quad 3x - 2y = 16 \quad \overset{-4}{\color{blue}\curvearrowright} \\ \hline 8x + 2y = 6 \quad 12x + 3y = 9 \\ 3x - 2y = 16 \quad -12x + 8y = -64 \\ \hline 11x = 22 \quad 11y = -55 \\ x = 2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array}$$
$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array}$$
$$\begin{array}{r} 3 \\ 12x + 3y = 9 \\ -4 \\ -12x + 8y = -64 \end{array}$$
$$\begin{array}{r} 12x + 3y = 9 \\ -12x + 8y = -64 \\ \hline 11y = -55 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.





# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

4.

$$\begin{array}{r} 2 \\ 4x + y = 3 \\ 3x - 2y = 16 \end{array} \quad \begin{array}{r} 3 \\ 3 \\ -4 \\ 3x - 2y = 16 \end{array}$$
$$\begin{array}{r} 8x + 2y = 6 \\ 3x - 2y = 16 \\ \hline 11x = 22 \\ x = 2 \end{array} \quad \begin{array}{r} 12x + 3y = 9 \\ -12x + 8y = -64 \\ \hline 11y = -55 \\ y = -5 \end{array}$$

$$\begin{array}{l} x = 2 \\ y = -5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by  $-4$ .

Notice that the  $x$  terms are opposite.

Add the equations.

Now, solve for  $y$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$3x + 5y = 12$$
$$2x + 3y = 7$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

To solve for  $x$ , we must eliminate the  $y$  terms.

5. 
$$3x + 5y = 12$$
$$2x + 3y = 7$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.


5. 
$$3x + 5y = 12$$
$$2x + 3y = 7$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array}$$
  
$$9x$$




To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \\ \hline 9x + 15y \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.


Multiply both sides of the top equation by 3.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \\ \hline 9x + 15y = 36 \end{array}$$




To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \\ \hline 9x + 15y = 36 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

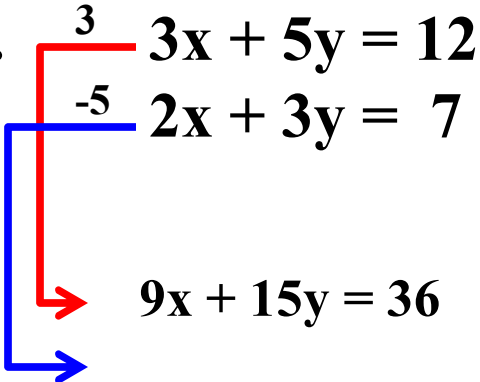
Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by  $-5$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{r} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \\ \hline 9x + 15y = 36 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by  $-5$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{r} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \\ \hline 9x + 15y = 36 \\ -10x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{r} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \\ \hline \xrightarrow{\phantom{3}} 9x + 15y = 36 \\ \xrightarrow{\phantom{-5}} -10x - 15y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5. 
$$\begin{array}{r} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \\ \hline \xrightarrow{\phantom{0}} 9x + 15y = 36 \\ \xrightarrow{\phantom{0}} -10x - 15y = -35 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \\ \hline \xrightarrow{\quad} 9x + 15y = 36 \\ \xrightarrow{\quad} -10x - 15y = -35 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \\ \hline \xrightarrow{\phantom{0}} 9x + 15y = 36 \\ \xrightarrow{\phantom{0}} -10x - 15y = -35 \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \hline -1x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{-10} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \hline -1x = 1 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{-10} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \hline -1x = 1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{-10} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \hline -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \hline -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \hline -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad \color{red}3x + 5y = 12 \quad \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-5}{\color{blue}\rule{1.5cm}{0.4pt}} \quad \color{blue}2x + 3y = 7 \\ \color{red}9x + 15y = 36 \\ \color{blue}-10x - 15y = -35 \\ \hline \color{red}-1x = 1 \\ \color{red}x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad \color{red}\rightarrow \\ 3x + 5y = 12 \\ \overset{-5}{\color{red}\rule{1.5cm}{0.4pt}} \quad \color{red}\rightarrow \\ 2x + 3y = 7 \\ \hline \color{red}\rightarrow \quad 9x + 15y = 36 \\ \color{blue}\rightarrow \quad -10x - 15y = -35 \\ \hline -1x = 1 \\ x = -1 \end{array}$$

$\overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad \color{red}\rightarrow \quad 6x$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \overset{3}{\color{red}\rightarrow} 3x + 5y = 12 \\ \overset{-5}{\color{red}\rightarrow} 2x + 3y = 7 \\ \hline \color{red}\rightarrow 9x + 15y = 36 \\ \color{blue}\rightarrow -10x - 15y = -35 \\ \hline -1x = 1 \\ x = -1 \end{array}$$

$\color{red}\rightarrow 6x + 10y$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{3} 9x + 15y = 36 \\ \xrightarrow{-5} -10x - 15y = -35 \\ \hline -1x = 1 \\ x = -1 \end{array} \end{array}$$

$\xrightarrow{2} 6x + 10y = 24$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} 3x + 5y = 12 \\ \xrightarrow{-5} 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{3} 9x + 15y = 36 \\ \xrightarrow{-5} -10x - 15y = -35 \\ \hline -1x = 1 \\ x = -1 \end{array} \end{array}$$
$$\begin{array}{l} \xrightarrow{2} 6x + 10y = 24 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} 9x + 15y = 36 \\ -10x - 15y = -35 \\ \hline -1x = 1 \\ x = -1 \end{array}$$
$$\begin{array}{r} 6x + 10y = 24 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 6x + 10y = 24 \\ -6x \end{array} \end{array}$$

---

$$\begin{array}{r} -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 6x + 10y = 24 \\ -6x - 9y \end{array} \end{array}$$

---

$$\begin{array}{r} -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 6x + 10y = 24 \\ -6x - 9y = -21 \end{array} \end{array}$$

---

$$\begin{array}{r} -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 6x + 10y = 24 \\ -6x - 9y = -21 \end{array} \end{array}$$

---

$$\begin{array}{r} -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 6x + 10y = 24 \\ -6x - 9y = -21 \end{array} \end{array}$$

---

$$\begin{array}{r} -1x = 1 \\ x = -1 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{r} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{r} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{r} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \begin{array}{r} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 6x + 10y = 24 \\ -6x - 9y = -21 \end{array} \end{array}$$

---

$$\begin{array}{r} -1x = 1 \\ x = -1 \end{array}$$

---

$$\begin{array}{r} y = 3 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

5.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 3x + 5y = 12 \\ 2x + 3y = 7 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$

$$\begin{array}{l} x = -1 \\ y = 3 \end{array}$$

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 9x + 15y = 36 \\ -10x - 15y = -35 \end{array} \\ \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 6x + 10y = 24 \\ -6x - 9y = -21 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-3} \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.  $x + 4y = -5$   
 $3x + 2y = 15$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.  $x + 4y = -5$   
 $3x + 2y = 15$

To solve for  $x$ , we must eliminate the  $y$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.


6.  $x + 4y = -5$   
 $3x + 2y = 15$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.  
$$\begin{array}{l} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$


$x + 4y = -5$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.  
$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \\ \hline x + 4y = -5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

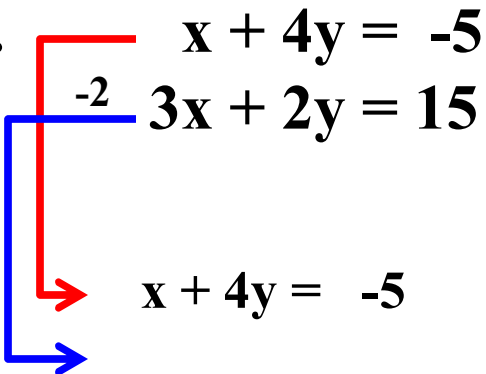
Multiply both sides of the bottom equation by  $-2$ .



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{0}x + 4y = -5 \\ -2 \phantom{0}x + 2y = 15 \\ \hline \phantom{0}x + 4y = -5 \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \xrightarrow{-2} \mathbf{x + 4y = -5} \\ \mathbf{3x + 2y = 15} \\ \xrightarrow{-6x} \mathbf{x + 4y = -5} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{l} \color{red}{\boxed{-}} \quad \color{red}{\boxed{-2}} \quad \mathbf{x + 4y = -5} \\ \mathbf{3x + 2y = 15} \\ \color{red}{\boxed{+}} \quad \color{red}{\boxed{-}} \quad \mathbf{x + 4y = -5} \\ \color{blue}{\boxed{-}} \quad \color{blue}{\boxed{-}} \quad \mathbf{-6x - 4y} \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \text{---} \text{---} \text{---} \text{---} \\ \text{---} \text{---} \text{---} \text{---} \\ \text{---} \text{---} \text{---} \text{---} \\ \text{---} \text{---} \text{---} \text{---} \end{array} \begin{array}{l} \mathbf{x + 4y = -5} \\ \mathbf{-2 \quad 3x + 2y = 15} \\ \\ \mathbf{x + 4y = -5} \\ \mathbf{-6x - 4y = -30} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6. 
$$\begin{array}{r} \phantom{3}x + 4y = -5 \\ -2 \phantom{3}x + 2y = 15 \\ \hline \phantom{3}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{3}x + 4y = -5 \\ -2 \phantom{3}x + 2y = 15 \\ \hline \phantom{3}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{3}x + 4y = -5 \\ -2 \phantom{3}x + 2y = 15 \\ \hline \phantom{3}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{3}x + 4y = -5 \\ -2 \phantom{3}x + 2y = 15 \\ \hline \phantom{3}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

Add the equations.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{3}x + 4y = -5 \\ -2 \phantom{3}x + 2y = 15 \\ \hline \phantom{3}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{0}x + 4y = -5 \\ -2 \phantom{0}x + 2y = 15 \\ \hline \phantom{0}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{3}x + 4y = -5 \\ -2 \phantom{3}x + 2y = 15 \\ \hline \phantom{3}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \phantom{0}x + 4y = -5 \\ -2 \phantom{0}x + 2y = 15 \\ \hline \phantom{0}x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-2$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ -2 \quad 3x + 2y = 15 \\ \hline x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Diagram: A red bracket above the equations spans from the coefficient 1 of x in the first equation to the coefficient 3 of x in the second equation. A red arrow labeled -3 points from the coefficient 3 to the coefficient 1. A blue bracket below the equations spans from the coefficient 3 of x in the second equation to the coefficient 1 of x in the first equation. A blue arrow labeled -2 points from the coefficient 1 to the coefficient 3.)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

*(Diagram: A red arrow labeled -3x points from the coefficient 3 of x in the second equation to the coefficient 1 of x in the first equation. A blue arrow labeled -6x - 4y = -30 points from the coefficient 3 of x in the second equation to the coefficient 1 of x in the first equation.)*

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Diagram: A red bracket above the equations indicates multiplication of the top equation by -3. A blue bracket to the left of the equations indicates multiplication of the bottom equation by -2. Red arrows point from the top equation to  $-3x - 12y$  and from the bottom equation to  $-6x - 4y = -30$ .)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Diagram: A red bracket labeled '-2' spans the top two equations. A red arrow labeled '-3' points from the top equation to the right. A blue arrow points from the top equation to the bottom equation. A blue arrow points from the bottom equation to the right.)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$
$$-3x - 12y = 15$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Diagram: A red bracket labeled '-2' connects the top two equations. A red arrow labeled '-3' points from the top equation to the right. A blue arrow points from the top equation down to the second equation. A blue arrow points from the bottom equation down to the third equation.)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$
$$\begin{array}{r} x + 4y = -5 \\ -3x - 12y = 15 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Diagram: A red bracket above the equations spans from the x-term of the first equation to the x-term of the second equation. A red arrow points from the x-term of the first equation to the x-term of the second equation. A blue bracket below the equations spans from the x-term of the second equation to the x-term of the first equation. A blue arrow points from the x-term of the second equation to the x-term of the first equation. The number -2 is written above the second equation, and -3 is written above the first equation.)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$
$$\begin{array}{r} -3x - 12y = 15 \\ 3x + 2y = 15 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Red arrows show the top equation being multiplied by -3 to get  $-3x - 12y = 15$ . Blue arrows show the bottom equation being multiplied by -2 to get  $-6x - 4y = -30$ .)*

$$\begin{array}{r} x + 4y = -5 \\ -3x - 12y = 15 \\ \hline -2x - 8y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Red arrow from -5 to -3, blue arrow from 15 to -30)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

*(Red arrow from -3 to -3x - 12y = 15, blue arrow from -3 to 3x + 2y = 15)*

$$\begin{array}{r} -3x - 12y = 15 \\ 3x + 2y = 15 \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Red arrow from -5 to -3, blue arrow from 3 to -2)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$
$$\begin{array}{r} -3x - 12y = 15 \\ 3x + 2y = 15 \\ \hline -10y \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Red arrow from -5 to -3, blue arrow from 3x to -2)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

*(Red arrow from -3 to -3x, blue arrow from 3x to 3x)*

$$\begin{array}{r} -3x - 12y = 15 \\ 3x + 2y = 15 \\ \hline -10y = 30 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Red arrow from -5 to -3, blue arrow from 3 to -2)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$
$$\begin{array}{r} -3x - 12y = 15 \\ 3x + 2y = 15 \\ \hline -10y = 30 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} \begin{array}{l} x + 4y = -5 \\ 3x + 2y = 15 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-3} \end{array} \\ \begin{array}{l} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} x + 4y = -5 \\ 3x + 2y = 15 \end{array} \\ \begin{array}{l} \xrightarrow{-3} \\ \xrightarrow{-2} \end{array} \\ \begin{array}{l} -3x - 12y = 15 \\ 3x + 2y = 15 \\ \hline -10y = 30 \\ y = -3 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

6.

$$\begin{array}{r} x + 4y = -5 \\ 3x + 2y = 15 \end{array}$$

*(Red arrow from -5 to -3, blue arrow from 2 to -2)*

$$\begin{array}{r} x + 4y = -5 \\ -6x - 4y = -30 \\ \hline -5x = -35 \\ x = 7 \end{array}$$

*(Red arrow from -3 to -3, blue arrow from 2 to -2)*

$$\begin{array}{r} -3x - 12y = 15 \\ 3x + 2y = 15 \\ \hline -10y = 30 \\ y = -3 \end{array}$$

$$\begin{array}{l} x = 7 \\ y = -3 \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -2.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.       $2x - y = 12$   
          $3x - 4y = 23$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

To solve for  $x$ , we must eliminate the  $y$  terms.

7. 
$$2x - y = 12$$
$$3x - 4y = 23$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7. 
$$2x - y = 12$$
$$3x - 4y = 23$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7. 
$$\begin{array}{r} -4 \\ \hline 2x - y = 12 \\ 3x - 4y = 23 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7. 
$$\begin{array}{r} -4 \\ \hline 2x - y = 12 \\ 3x - 4y = 23 \\ \hline -8x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7. 
$$\begin{array}{r} -4 \\ \hline 2x - y = 12 \\ 3x - 4y = 23 \\ \hline -8x + 4y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .







## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7. 
$$\begin{array}{r} \overset{-4}{\color{red}} \color{red} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \\ \color{blue} \left[ \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \right. \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \overset{-4}{\color{red}} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \\ \color{blue} \left[ \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \right. \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \overset{-4}{\color{red}} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \\ \color{blue} \left[ \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \right. \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{-4} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \begin{array}{l} \xrightarrow{-4} -8x + 4y = -48 \\ \xrightarrow{\phantom{-4}} 3x - 4y = 23 \\ \hline -5x \end{array} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} \xrightarrow{-4} \\ \downarrow \\ \rightarrow \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \begin{array}{r} \downarrow \\ \rightarrow \end{array} \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \\ \hline -5x = -25 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 7. \quad \begin{array}{l} \overset{-4}{\color{red}} \color{red}{\rightarrow} \\ \color{blue}{\rightarrow} \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \begin{array}{l} \color{red}{\rightarrow} \\ \color{blue}{\rightarrow} \end{array} \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \\ \hline -5x = -25 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} \xrightarrow{-4} \\ \xrightarrow{-4} \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \begin{array}{l} \xrightarrow{-4} \\ \xrightarrow{-4} \end{array} \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \\ \hline -5x = -25 \\ x = 5 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 7. \quad \begin{array}{l} \overset{-4}{\color{red}} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \\ \color{blue} \left[ \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \right. \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 7. \quad \begin{array}{l} \overset{-4}{\color{red}} \quad 2x - y = 12 \\ \quad \quad \quad 3x - 4y = 23 \\ \hline \color{red} \rightarrow -8x + 4y = -48 \\ \color{blue} \rightarrow 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

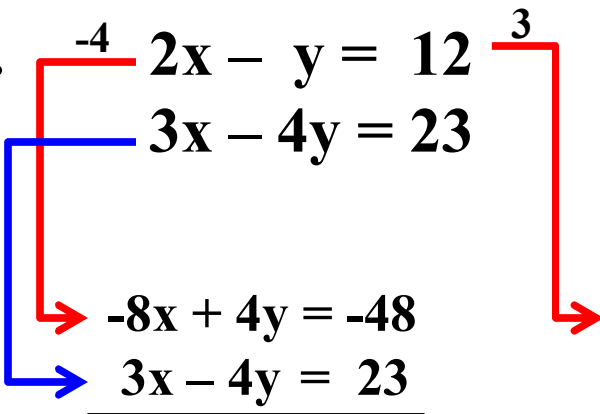
To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} -4 \quad 2x - y = 12 \quad 3 \\ 3x - 4y = 23 \\ \hline -8x + 4y = -48 \\ 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-4$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} -4 \\ 2x - y = 12 \end{array} \\ \begin{array}{r} 3x - 4y = 23 \end{array} \\ \hline \begin{array}{r} -8x + 4y = -48 \\ 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$

*(Note: In the original image, a red arrow labeled '-4' points from the top equation to the first equation of the second system, and a blue arrow labeled '3' points from the bottom equation to the second equation of the second system. A red arrow labeled '6x' points to the result of adding the two equations in the second system.)*

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} \xrightarrow{-4} 2x - y = 12 \\ \xrightarrow{3} 3x - 4y = 23 \end{array} \\ \begin{array}{r} \xrightarrow{-4} -8x + 4y = -48 \\ \xrightarrow{3} 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$

$6x - 3y$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} \overset{-4}{\color{red}\rule{1.5cm}{0.4pt}} \color{red} 2x - y = 12 \\ \color{blue}\rule{1.5cm}{0.4pt} \color{blue} 3x - 4y = 23 \end{array} \\ \begin{array}{r} \color{red}\rule{1.5cm}{0.4pt} \color{red} -8x + 4y = -48 \\ \color{blue}\rule{1.5cm}{0.4pt} \color{blue} 3x - 4y = 23 \\ \hline \color{red} -5x = -25 \\ \color{red} x = 5 \end{array} \end{array}$$

$\begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \color{red} 2x - y = 12 \\ \color{red}\rule{1.5cm}{0.4pt} \color{red} 6x - 3y = 36 \end{array}$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} \overset{-4}{\color{red}{\curvearrowright}} \quad 2x - y = 12 \\ \color{blue}{\curvearrowright} \quad 3x - 4y = 23 \end{array} \\ \begin{array}{r} \color{red}{\curvearrowright} \quad 2x - y = 12 \\ \color{red}{\curvearrowright} \quad 3x - 4y = 23 \end{array} \\ \hline \begin{array}{r} -8x + 4y = -48 \\ 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$

$6x - 3y = 36$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} -4 \\ 3x - 4y = 23 \end{array} \quad \begin{array}{r} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{r} -8x + 4y = -48 \\ 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$

*(Note: The diagram shows a red arrow from the coefficient -4 of the first equation to the coefficient 2 of the second equation, and a blue arrow from the coefficient 3 of the second equation to the coefficient 2 of the first equation. This results in the equations  $-8x + 4y = -48$  and  $3x - 4y = 23$  being added to get  $-5x = -25$ .)*

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} -4 \\ 3 \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{r} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \\ \hline -5x = -25 \\ x = 5 \end{array}$$

*(Note: In the original image, red arrows and numbers indicate multiplying the top equation by -4 and the bottom equation by 3. Blue arrows and numbers indicate multiplying the top equation by 3 and the bottom equation by -2.)*

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} \overset{-4}{\color{red}} \quad \color{red} 2x - y = 12 \\ \color{blue} 3x - 4y = 23 \end{array} \\ \color{red} \left. \begin{array}{l} \color{red} \phantom{2x - y = 12} \\ \color{red} \phantom{3x - 4y = 23} \end{array} \right\} \begin{array}{l} \color{red} \phantom{2x - y = 12} \\ \color{red} \phantom{3x - 4y = 23} \end{array} \\ \color{blue} \left. \begin{array}{l} \color{blue} \phantom{2x - y = 12} \\ \color{blue} \phantom{3x - 4y = 23} \end{array} \right\} \begin{array}{l} \color{blue} \phantom{2x - y = 12} \\ \color{blue} \phantom{3x - 4y = 23} \end{array} \\ \hline \begin{array}{r} \color{red} -8x + 4y = -48 \\ \color{blue} 3x - 4y = 23 \\ \hline \color{red} -5x = -25 \\ \color{red} x = 5 \end{array} \end{array}$$

$\color{red} 2x - y = 12$        $\color{red} 6x - 3y = 36$

$\color{blue} 3x - 4y = 23$        $\color{blue} -6x + 8y$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{-4} 2x - y = 12 \\ \xrightarrow{-2} 3x - 4y = 23 \end{array} \\ \begin{array}{l} \xrightarrow{-4} -8x + 4y = -48 \\ \xrightarrow{-2} 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} 2x - y = 12 \\ \xrightarrow{-2} 3x - 4y = 23 \end{array} \\ \begin{array}{l} \xrightarrow{3} 6x - 3y = 36 \\ \xrightarrow{-2} -6x + 8y = -46 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} \overset{-4}{\color{red}\rule{1.5cm}{0.4pt}} \color{red}\rightarrow \\ \color{blue}\rule{1.5cm}{0.4pt} \color{blue}\rightarrow \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \color{red}\rightarrow \\ \color{blue}\rule{1.5cm}{0.4pt} \color{blue}\rightarrow \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} 6x - 3y = 36 \\ -6x + 8y = -46 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} -4 \\ 3x - 4y = 23 \end{array} \quad \begin{array}{r} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{r} -8x + 4y = -48 \\ 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{r} 3 \\ -2 \end{array} \quad \begin{array}{r} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{r} 6x - 3y = 36 \\ -6x + 8y = -46 \\ \hline \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{l} \overset{-4}{\color{red}} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \\ \color{blue} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \end{array} \\ \begin{array}{l} \color{red} \rightarrow -8x + 4y = -48 \\ \color{blue} \rightarrow 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \overset{3}{\color{red}} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \\ \color{blue} \left[ \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \right. \end{array} \\ \begin{array}{l} \color{red} \rightarrow 6x - 3y = 36 \\ \color{blue} \rightarrow -6x + 8y = -46 \\ \hline 5y \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{r} -4 \\ 3x - 4y = 23 \end{array} \\ \begin{array}{r} 2x - y = 12 \\ \hline -8x + 4y = -48 \\ \hline 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{r} 3 \\ -2 \end{array} \\ \begin{array}{r} 6x - 3y = 36 \\ \hline -6x + 8y = -46 \\ \hline 5y = -10 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{l} \overset{-4}{\color{red}\rightarrow} 2x - y = 12 \\ \color{blue}\rightarrow 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} \color{red}\rightarrow -8x + 4y = -48 \\ \color{blue}\rightarrow 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \overset{3}{\color{red}\rightarrow} 2x - y = 12 \\ \color{blue}\rightarrow 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} \color{red}\rightarrow 6x - 3y = 36 \\ \color{blue}\rightarrow -6x + 8y = -46 \\ \hline 5y = -10 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{l} \overset{-4}{\color{red}} \rightarrow \\ \color{blue} \rightarrow \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} \color{red} \rightarrow \\ \color{blue} \rightarrow \end{array} \begin{array}{l} -8x + 4y = -48 \\ 3x - 4y = 23 \end{array} \\ \hline -5x = -25 \\ x = 5 \end{array}$$
$$\begin{array}{r} \begin{array}{l} \overset{3}{\color{red}} \rightarrow \\ \color{blue} \rightarrow \end{array} \begin{array}{l} 2x - y = 12 \\ 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} \color{red} \rightarrow \\ \color{blue} \rightarrow \end{array} \begin{array}{l} 6x - 3y = 36 \\ -6x + 8y = -46 \end{array} \\ \hline 5y = -10 \\ y = -2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

7.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{-4} 2x - y = 12 \\ \xrightarrow{-2} 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} \xrightarrow{-4} -8x + 4y = -48 \\ \xrightarrow{-2} 3x - 4y = 23 \\ \hline -5x = -25 \\ x = 5 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} 2x - y = 12 \\ \xrightarrow{-2} 3x - 4y = 23 \end{array} \\ \hline \begin{array}{l} \xrightarrow{3} 6x - 3y = 36 \\ \xrightarrow{-2} -6x + 8y = -46 \\ \hline 5y = -10 \\ y = -2 \end{array} \end{array}$$

$$\begin{array}{l} x = 5 \\ y = -2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -4.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$4x - 5y = 17$$
$$x - 2y = 8$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$4x - 5y = 17$$
$$x - 2y = 8$$

To solve for  $x$ , we must eliminate the  $y$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$4x - 5y = 17$$
$$x - 2y = 8$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.


Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$

$8x$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ \hline 4x - 5y = 17 \\ x - 2y = 8 \\ \hline 8x - 10y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ \rightarrow \\ 4x - 5y = 17 \\ x - 2y = 8 \\ \rightarrow \\ 8x - 10y = 34 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ \rightarrow \\ 4x - 5y = 17 \\ x - 2y = 8 \\ \rightarrow \\ 8x - 10y = 34 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

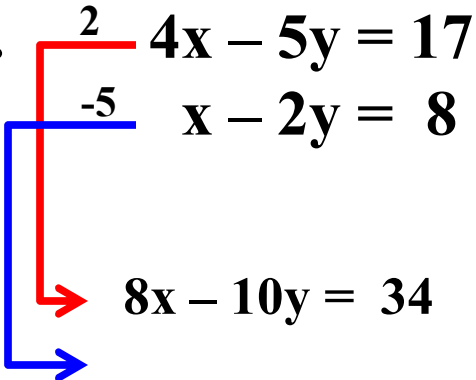
Multiply both sides of the bottom equation by  $-5$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$

$$8x - 10y = 34$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$
  
$$\begin{array}{l} \rightarrow 8x - 10y = 34 \\ \rightarrow -5x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \xrightarrow{2} 4x - 5y = 17 \\ \xrightarrow{-5} x - 2y = 8 \\ \hline \xrightarrow{2} 8x - 10y = 34 \\ \xrightarrow{-5} -5x + 10y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$
  
$$\begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8. 
$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$

$$\begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $y$  terms are opposite.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$
  
$$\begin{array}{l} \rightarrow 8x - 10y = 34 \\ \rightarrow -5x + 10y = -40 \end{array}$$

---

The diagram shows a red bracket on the left of the first two equations, with a '2' above it and a '-5' below it. A red arrow points from the first equation to the third equation. A blue bracket on the left of the last two equations has a blue arrow pointing from the second equation to the third equation.

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

Add the equations.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} \xrightarrow{\phantom{2}} \\ \xrightarrow{\phantom{-5}} \end{array} \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{r} \xrightarrow{2} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} \xrightarrow{8x - 10y = 34} \\ \xrightarrow{-5x + 10y = -40} \end{array} \\ \hline 3x = -6 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} \xrightarrow{\phantom{2}} \\ \xrightarrow{\phantom{-5}} \end{array} \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} \xrightarrow{2} \\ \xrightarrow{-5} \end{array} \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$
  
$$\begin{array}{r} 8x - 10y = 34 \\ -5x + 10y = -40 \\ \hline 3x = -6 \\ x = -2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$
$$\begin{array}{r} 8x - 10y = 34 \\ -5x + 10y = -40 \\ \hline 3x = -6 \\ x = -2 \end{array}$$
$$4x - 5y = 17$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

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# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$
  
$$\begin{array}{r} 8x - 10y = 34 \\ -5x + 10y = -40 \\ \hline 3x = -6 \\ x = -2 \end{array}$$
  
$$4x - 5y = 17$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

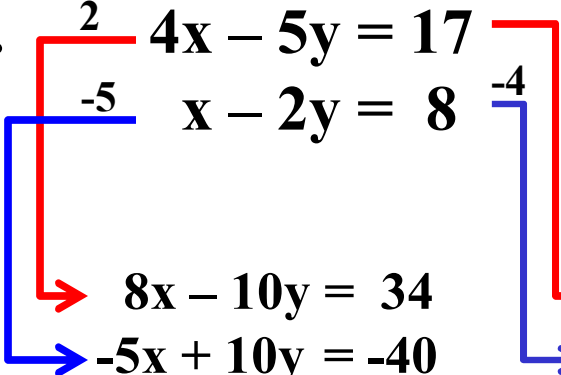


# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{r} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{r} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$



$$\begin{array}{r} \begin{array}{r} -4 \\ -4 \end{array} \begin{array}{r} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline 4x - 5y = 17 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} 2 \\ -5 \end{array} \begin{array}{r} 4x - 5y = 17 \\ x - 2y = 8 \end{array}$$
  
$$\begin{array}{r} 8x - 10y = 34 \\ -5x + 10y = -40 \\ \hline 3x = -6 \\ x = -2 \end{array}$$
  
$$\begin{array}{r} -4 \\ -4 \end{array} \begin{array}{r} 4x - 5y = 17 \\ -4x \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \\ \hline 3x = -6 \\ x = -2 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} 4x - 5y = 17 \\ -4x + 8y \end{array} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-4$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \\ \hline 3x = -6 \\ x = -2 \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} 4x - 5y = 17 \\ -4x + 8y = -32 \end{array} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-4$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$
$$\begin{array}{r} \begin{array}{l} -4 \end{array} \begin{array}{l} 4x - 5y = 17 \\ -4x + 8y = -32 \end{array} \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-4$ .

Notice that the  $x$  terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$
$$\begin{array}{r} \begin{array}{l} -4 \end{array} \begin{array}{l} 4x - 5y = 17 \\ -4x + 8y = -32 \end{array} \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$
$$\begin{array}{r} \begin{array}{l} -4 \end{array} \begin{array}{l} 4x - 5y = 17 \\ -4x + 8y = -32 \end{array} \\ \hline 3y \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{l} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$
$$\begin{array}{r} \begin{array}{l} -4 \end{array} \begin{array}{l} 4x - 5y = 17 \\ -4x + 8y = -32 \end{array} \\ \hline 3y = -15 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by  $-5$ .

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by  $-4$ .

Notice that the  $x$  terms are opposite.

Add the equations.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$$\begin{array}{r} \begin{array}{r} 2 \\ -5 \end{array} \begin{array}{l} 4x - 5y = 17 \\ x - 2y = 8 \end{array} \\ \hline \begin{array}{r} 8x - 10y = 34 \\ -5x + 10y = -40 \end{array} \\ \hline 3x = -6 \\ x = -2 \end{array}$$
$$\begin{array}{r} \begin{array}{r} -4 \end{array} \begin{array}{l} 4x - 5y = 17 \\ -4x + 8y = -32 \end{array} \\ \hline 3y = -15 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

$2$	$4x - 5y = 17$	
$-5$	$x - 2y = 8$	$-4$
	$8x - 10y = 34$	$4x - 5y = 17$
	$-5x + 10y = -40$	$-4x + 8y = -32$
	<hr/>	<hr/>
	$3x = -6$	$3y = -15$
	$x = -2$	$y = -5$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

8.

	$2$	$4x - 5y = 17$	
	$-5$	$x - 2y = 8$	
$\rightarrow$		$8x - 10y = 34$	
$\rightarrow$		$-5x + 10y = -40$	
		<hr/>	
		$3x = -6$	
		$x = -2$	

	$-4$	$4x - 5y = 17$	
		$-4x + 8y = -32$	
		<hr/>	
		$3y = -15$	
		$y = -5$	

$x = -2$   
 $y = -5$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by -5.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{aligned} 3x + 7y &= 6 \\ x - 3y &= -2 \end{aligned}$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$3x + 7y = 6$$
$$x - 3y = -2$$

To solve for  $x$ , we must eliminate the  $y$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{aligned} 3x + 7y &= 6 \\ x - 3y &= -2 \end{aligned}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ \hline 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$




To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$
  
  
$$9x$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ \hline 3x + 7y = 6 \\ x - 3y = -2 \\ \hline 9x + 21y \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$
  
$$9x + 21y = 18$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ \rightarrow \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \\ \rightarrow \\ 9x + 21y = 18 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ 7 \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$
  
$$\begin{array}{l} \rightarrow 9x + 21y = 18 \\ \rightarrow \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ 7 \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$

$$\begin{array}{l} \rightarrow 9x + 21y = 18 \\ \rightarrow 7x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ 7 \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$
  
$$\begin{array}{l} \rightarrow 9x + 21y = 18 \\ \rightarrow 7x - 21y \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ \times \\ 3x + 7y = 6 \\ \hline 7 \\ \times \\ x - 3y = -2 \\ \hline 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9. 
$$\begin{array}{r} 3 \\ \times \\ 3x + 7y = 6 \\ \hline 7 \\ \times \\ x - 3y = -2 \\ \hline 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} 3 \\ 7 \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$
  
$$\begin{array}{l} \rightarrow 9x + 21y = 18 \\ \rightarrow 7x - 21y = -14 \end{array}$$

---

The diagram shows a red bracket on the left of the first two equations, with a '3' above it. A red arrow points from the top equation to the resulting equation  $9x + 21y = 18$ . A blue bracket on the left of the first two equations, with a '7' above it, and a blue arrow pointing from the bottom equation to the resulting equation  $7x - 21y = -14$ . The final two equations are underlined.

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} 3 \\ 7 \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array}$$
$$\begin{array}{r} 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$3x + 7y = 6$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Bring down the top equation.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$

$3x + 7y = 6$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$\begin{array}{r} 3x + 7y = 6 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$\begin{array}{r} 3x + 7y = 6 \\ -3x \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array}$$

---

$$16x = 4$$
$$x = \frac{1}{4}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$\begin{array}{r} 3x + 7y = 6 \\ -3x + 9y = 6 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$\begin{array}{r} 3x + 7y = 6 \\ -3x + 9y = 6 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{7} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} 9x + 21y = 18 \\ 7x - 21y = -14 \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$\begin{array}{r} 3x + 7y = 6 \\ -3x + 9y = 6 \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{7} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{7} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{7} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ -3x + 9y = 6 \end{array} \\ \hline 16y \end{array}$$
$$x = \frac{1}{4}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{7} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \end{array}$$
$$x = \frac{1}{4}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{7} \\ \xrightarrow{-3} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ -3x + 9y = 6 \end{array} \\ \hline 16y = 12 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{7} \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \begin{array}{l} \xrightarrow{9} \\ \xrightarrow{7} \end{array} \begin{array}{l} 9x + 21y = 18 \\ 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$\begin{array}{r} \begin{array}{l} \xrightarrow{-3} \\ \xrightarrow{-3} \end{array} \begin{array}{l} 3x + 7y = 6 \\ -3x + 9y = 6 \end{array} \\ \hline 16y = 12 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

	$3$	$3x + 7y = 6$	
	$7$	$x - 3y = -2$	$-3$
$\rightarrow$		$9x + 21y = 18$	$\rightarrow$
$\rightarrow$		$7x - 21y = -14$	$\rightarrow$
		<hr/>	
		$16x = 4$	
		$x = \frac{1}{4}$	

	$3$	$3x + 7y = 6$	
	$-3$	$x - 3y = -2$	
$\rightarrow$		$3x + 7y = 6$	$\rightarrow$
$\rightarrow$		$-3x + 9y = 6$	$\rightarrow$
		<hr/>	
		$16y = 12$	
		$y = \frac{3}{4}$	

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

9.

$$\begin{array}{r} \begin{array}{l} 3 \\ 7 \end{array} \begin{array}{l} 3x + 7y = 6 \\ x - 3y = -2 \end{array} \\ \hline \begin{array}{l} \xrightarrow{3} 9x + 21y = 18 \\ \xrightarrow{7} 7x - 21y = -14 \end{array} \\ \hline 16x = 4 \\ x = \frac{1}{4} \end{array}$$
$$\begin{array}{r} \begin{array}{l} -3 \\ -3 \end{array} \begin{array}{l} 3x + 7y = 6 \\ -3x + 9y = 6 \end{array} \\ \hline 16y = 12 \\ y = \frac{3}{4} \end{array}$$

$$\begin{array}{l} x = \frac{1}{4} \\ y = \frac{3}{4} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by 7.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Bring down the top equation.

Multiply both sides of the bottom equation by -3.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10. 
$$\begin{aligned} 4x + y &= 1 \\ 3x + 2y &= 0 \end{aligned}$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10. 
$$\begin{aligned} 4x + y &= 1 \\ 3x + 2y &= 0 \end{aligned}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10. 
$$4x + y = 1$$
$$3x + 2y = 0$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10. 
$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .




## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10. 
$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \end{array}$$

$$\begin{array}{r} -8x \end{array}$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10. 
$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ \hline 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10. 
$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

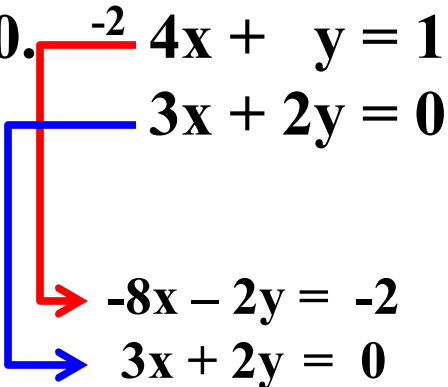
Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 10. \quad \begin{array}{l} \overset{-2}{\color{red}} 4x + y = 1 \\ \color{blue} 3x + 2y = 0 \end{array} \\ \color{red} \begin{array}{l} \downarrow \\ \rightarrow \end{array} \begin{array}{l} -8x - 2y = -2 \\ \color{blue} 3x + 2y = 0 \end{array} \\ \hline \color{red} -5x = -2 \\ \\ \color{red} x = \frac{2}{5} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \\ x = \frac{2}{5} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \\ \hline -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \\ x = \frac{2}{5} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

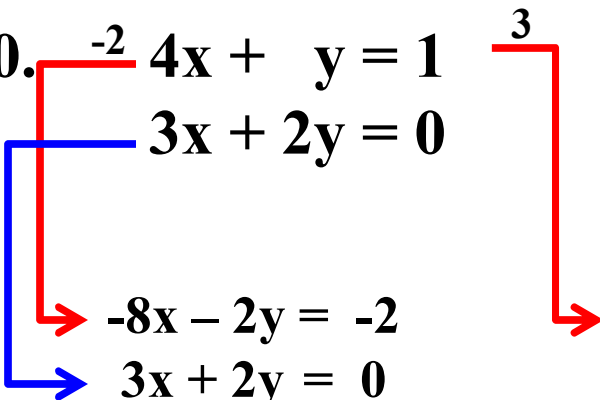
Multiply both sides of the top equation by  $3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \quad 4x + y = 1 \\ 3x + 2y = 0 \end{array}$$



$$\begin{array}{r} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$
$$x = \frac{2}{5}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \quad 4x + y = 1 \\ 3x + 2y = 0 \end{array}$$

$\xrightarrow{-2}$

$$\begin{array}{r} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$

$\xrightarrow{3}$

$$12x$$
$$x = \frac{2}{5}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \quad 4x + y = 1 \\ 3x + 2y = 0 \end{array}$$

$\xrightarrow{-2}$

$$\begin{array}{r} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$

$\xrightarrow{3}$

$$12x + 3y$$
$$x = \frac{2}{5}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.





# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{r} -2 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{r} 4x + y = 1 \\ 3x + 2y = 0 \end{array} \end{array}$$

$-8x - 2y = -2$

$3x + 2y = 0$

---

$$-5x = -2$$
$$x = \frac{2}{5}$$

$12x + 3y = 3$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $3$ .

Multiply both sides of the bottom equation by  $-4$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{r} -2 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{r} 4x + y = 1 \\ 3x + 2y = 0 \end{array} \end{array}$$

$-8x - 2y = -2$

$3x + 2y = 0$

---

$$-5x = -2$$
$$x = \frac{2}{5}$$

$3$

$-4$

$12x + 3y = 3$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by  $-2$ .

Bring down the bottom equation.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $3$ .

Multiply both sides of the bottom equation by  $-4$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \quad 4x + y = 1 \\ \quad 3x + 2y = 0 \end{array}$$

$\xrightarrow{-2}$

$$\begin{array}{r} -8x - 2y = -2 \\ \quad 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$

$\xrightarrow{3}$

$$\begin{array}{r} 12x + 3y = 3 \\ -12x \end{array}$$

$\xrightarrow{-4}$

$$x = \frac{2}{5}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{r} -2 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{r} 4x + y = 1 \\ 3x + 2y = 0 \end{array} \end{array}$$

Diagram: A red arrow points from the coefficient 4 in the top equation to the coefficient -2 in the bottom equation. A blue arrow points from the coefficient 3 in the top equation to the coefficient 3 in the bottom equation.

$$\begin{array}{r} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$
$$x = \frac{2}{5}$$

Diagram: A red arrow points from the coefficient 3 in the top equation to the coefficient 12 in the bottom equation. A blue arrow points from the coefficient -4 in the bottom equation to the coefficient -12 in the bottom equation.

$$\begin{array}{r} 12x + 3y = 3 \\ -12x - 8y \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} -2 \quad 4x + y = 1 \\ 3x + 2y = 0 \end{array}$$

$\xrightarrow{-2}$

$$\begin{array}{r} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$

$\xrightarrow{3}$

$$\begin{array}{r} 12x + 3y = 3 \\ -12x - 8y = 0 \end{array}$$

$\xrightarrow{-4}$

$$x = \frac{2}{5}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

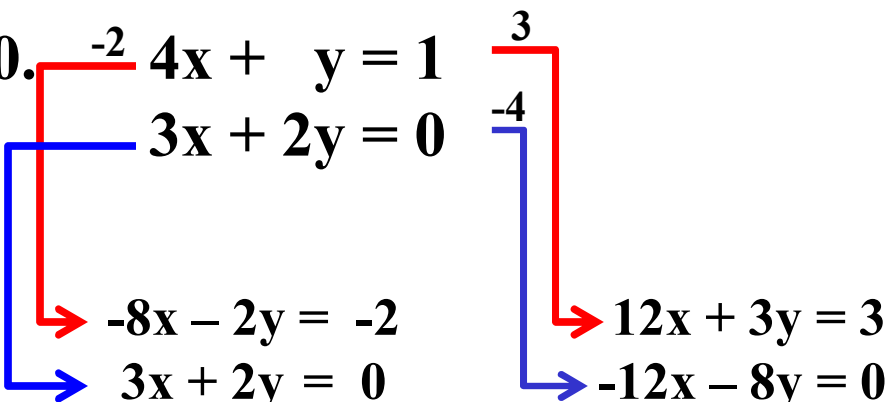
Multiply both sides of the bottom equation by -4.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{r} -2 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{r} 4x + y = 1 \\ 3x + 2y = 0 \end{array} \end{array}$$



$$\begin{array}{r} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \end{array}$$
$$x = \frac{2}{5}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{l} -2 \quad 4x + y = 1 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-4} \end{array} \\ \hline \begin{array}{l} -8x - 2y = -2 \\ 3x + 2y = 0 \end{array} \\ \hline -5x = -2 \\ \\ x = \frac{2}{5} \end{array}$$
$$\begin{array}{r} \begin{array}{l} 3 \\ -4 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-4} \end{array} \\ \hline \begin{array}{l} 12x + 3y = 3 \\ -12x - 8y = 0 \end{array} \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{r} -2 \\ 4x + y = 1 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{r} \xrightarrow{-2} \\ \xrightarrow{-2} \end{array} \\ \begin{array}{r} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \\ x = \frac{2}{5} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{r} 3 \\ 12x + 3y = 3 \\ -12x - 8y = 0 \end{array} \\ \begin{array}{r} \xrightarrow{3} \\ \xrightarrow{-4} \end{array} \\ \begin{array}{r} 12x + 3y = 3 \\ -12x - 8y = 0 \\ \hline -5y \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{l} -2 \quad 4x + y = 1 \\ \phantom{-2} \quad 3x + 2y = 0 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-4} \end{array} \\ \begin{array}{l} -8x - 2y = -2 \\ \phantom{-8x} \quad 3x + 2y = 0 \\ \hline -5x = -2 \end{array} \\ x = \frac{2}{5} \end{array}$$
$$\begin{array}{r} \begin{array}{l} 3 \\ -4 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-4} \end{array} \\ \begin{array}{l} 12x + 3y = 3 \\ -12x - 8y = 0 \\ \hline -5y = 3 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{l} -2 \quad 4x + y = 1 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-4} \end{array} \\ \begin{array}{l} -8x - 2y = -2 \\ 3x + 2y = 0 \\ \hline -5x = -2 \\ x = \frac{2}{5} \end{array} \end{array}$$
$$\begin{array}{r} \begin{array}{l} 3 \\ -4 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-4} \end{array} \\ \begin{array}{l} 12x + 3y = 3 \\ -12x - 8y = 0 \\ \hline -5y = 3 \end{array} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

10.

$$\begin{array}{r} \begin{array}{l} -2 \quad 4x + y = 1 \\ 3x + 2y = 0 \end{array} \\ \begin{array}{l} \xrightarrow{-2} \\ \xrightarrow{-4} \end{array} \\ \hline \begin{array}{l} -8x - 2y = -2 \\ 3x + 2y = 0 \end{array} \\ \hline -5x = -2 \\ x = \frac{2}{5} \end{array}$$
$$\begin{array}{r} \begin{array}{l} 3 \\ -4 \end{array} \\ \begin{array}{l} \xrightarrow{3} \\ \xrightarrow{-4} \end{array} \\ \hline \begin{array}{l} 12x + 3y = 3 \\ -12x - 8y = 0 \end{array} \\ \hline -5y = 3 \\ y = -\frac{3}{5} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by -2.

Bring down the bottom equation.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -4.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11. 
$$\begin{aligned}x - 4y &= 3 \\3x + y &= 2\end{aligned}$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.  $x - 4y = 3$   
 $3x + y = 2$

To solve for  $x$ , we must eliminate the  $y$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.  $x - 4y = 3$   
 $3x + y = 2$

To solve for  $x$ , we must eliminate the  $y$  terms.


Bring down the top equation.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.  $x - 4y = 3$   
 $3x + y = 2$




$x - 4y = 3$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.   $x - 4y = 3$   
 $3x + y = 2$   
 $x - 4y = 3$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.















# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 4 \cdot 3x + y = 2 \\ \hline x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} \phantom{4} x - 4y = 3 \\ 4 \phantom{x} + y = 2 \\ \hline \phantom{4} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 4 \cdot 3x + y = 2 \\ \hline x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

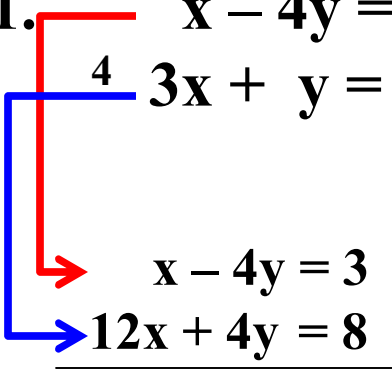
Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 4 \cdot 3x + y = 2 \\ \hline x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$


$$x = \frac{11}{13}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 4 \cdot 3x + y = 2 \\ \hline x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \\ \\ x = \frac{11}{13} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 4 \cdot 3x + y = 2 \\ \hline x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \\ \\ x = \frac{11}{13} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 4 \cdot 3x + y = 2 \\ \hline x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \\ \\ x = \frac{11}{13} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

4

$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

$x = \frac{11}{13}$

$-3$

$-3x$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "4" points from the coefficient of  $y$  in the second equation to the coefficient of  $y$  in the first equation.
- A red arrow labeled "-3" points from the coefficient of  $x$  in the first equation to the coefficient of  $x$  in the second equation.
- The resulting system is shown below:

$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$
$$x = \frac{11}{13}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

4

$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

-3

$$\begin{array}{r} x - 4y = 3 \\ -3x + 12y = -9 \end{array}$$
$$x = \frac{11}{13}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

Diagram illustrating the multiplication-addition method:

- A red arrow labeled "4" points from the coefficient of  $y$  in the second equation to the coefficient of  $y$  in the first equation.
- A blue arrow points from the coefficient of  $x$  in the first equation to the coefficient of  $x$  in the second equation.
- A red arrow labeled "-3" points from the coefficient of  $x$  in the first equation to the coefficient of  $x$  in the second equation.

$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$
$$x = \frac{11}{13}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

Bring down the bottom equation.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

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$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

-3

$$\begin{array}{r} -3x + 12y = -9 \\ 3x + y = 2 \end{array}$$
$$x = \frac{11}{13}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

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Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

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$$\begin{array}{r} -3x + 12y = -9 \\ 3x + y = 2 \end{array}$$
$$x = \frac{11}{13}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

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$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

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$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

$x = \frac{11}{13}$

-3

$$\begin{array}{r} -3x + 12y = -9 \\ 3x + y = 2 \\ \hline \end{array}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

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$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

$x = \frac{11}{13}$

-3

$$\begin{array}{r} -3x + 12y = -9 \\ 3x + y = 2 \\ \hline 13y \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

Bring down the bottom equation.

Notice that the  $x$  terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

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$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

4

$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$
$$x = \frac{11}{13}$$

-3

$$\begin{array}{r} -3x + 12y = -9 \\ 3x + y = 2 \\ \hline 13y = -7 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

Bring down the bottom equation.

Notice that the  $x$  terms are opposite.

Add the equations.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

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$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$

$x = \frac{11}{13}$

-3

$$\begin{array}{r} -3x + 12y = -9 \\ 3x + y = 2 \\ \hline 13y = -7 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

To solve for  $y$ , we must eliminate the  $x$  terms.

Multiply both sides of the top equation by  $-3$ .

Bring down the bottom equation.

Notice that the  $x$  terms are opposite.

Add the equations.

Now, solve for  $y$ .

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

4

$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$
$$x = \frac{11}{13}$$

-3

$$\begin{array}{r} -3x + 12y = -9 \\ 3x + y = 2 \\ \hline 13y = -7 \end{array}$$
$$y = \frac{-7}{13}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

11.

$$\begin{array}{r} x - 4y = 3 \\ 3x + y = 2 \end{array}$$

4

$$\begin{array}{r} x - 4y = 3 \\ 12x + 4y = 8 \\ \hline 13x = 11 \end{array}$$
$$x = \frac{11}{13}$$

-3

$$\begin{array}{r} x - 4y = 3 \\ -3x + 12y = -9 \\ 3x + y = 2 \\ \hline 13y = -7 \end{array}$$
$$y = \frac{-7}{13}$$

$$x = \frac{11}{13}$$
$$y = \frac{-7}{13}$$

To solve for x, we must eliminate the y terms.

Bring down the top equation.

Multiply both sides of the bottom equation by 4.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by -3.

Bring down the bottom equation.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12.  $2x + 3y = 4$   
 $3x - 2y = 5$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

To solve for  $x$ , we must eliminate the  $y$  terms.

12. 
$$2x + 3y = 4$$
$$3x - 2y = 5$$

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12.  $2x + 3y = 4$   
 $3x - 2y = 5$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12. 
$$\begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$



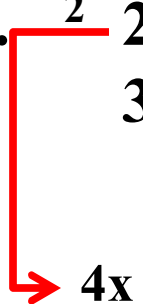
To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12. 
$$\begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$



$4x$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.




## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12. 
$$\begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$

$$4x + 6y$$



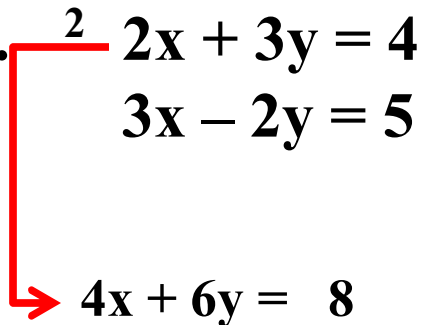
To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12. 
$$\begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$
  
$$4x + 6y = 8$$



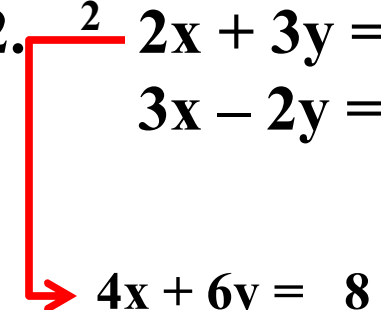
To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12. 
$$\begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$
  
$$4x + 6y = 8$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

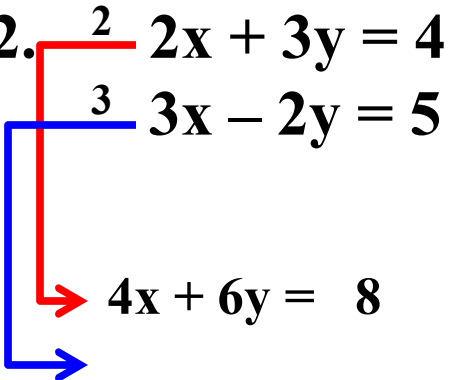
Multiply both sides of the bottom equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12. 
$$\begin{array}{r} 2 \\ 3 \end{array} \begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$

$$4x + 6y = 8$$



To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12.

$$\begin{array}{r} 2 \\ 3 \end{array} \begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$
  
$$\begin{array}{l} \rightarrow 4x + 6y = 8 \\ \rightarrow 9x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

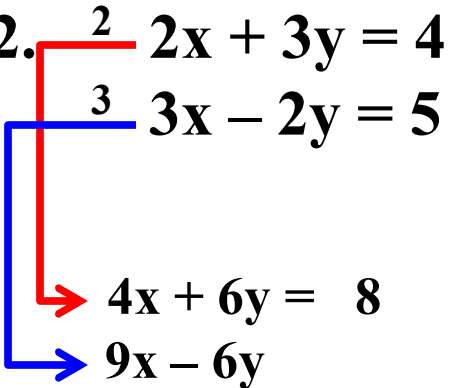
Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12.

$$\begin{array}{r} 2 \\ 3 \end{array} \begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$
  
$$\begin{array}{l} \rightarrow 4x + 6y = 8 \\ \rightarrow 9x - 6y \end{array}$$


To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12.

$$\begin{array}{r} 2 \\ 3 \end{array} \begin{array}{l} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$
  
$$\begin{array}{l} \rightarrow 4x + 6y = 8 \\ \rightarrow 9x - 6y = 15 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{l} 12. \quad \begin{array}{l} \xrightarrow{2} 2x + 3y = 4 \\ \xrightarrow{3} 3x - 2y = 5 \end{array} \\ \begin{array}{l} \xrightarrow{4} 4x + 6y = 8 \\ \xrightarrow{9} 9x - 6y = 15 \end{array} \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the  $y$  terms are opposite.



## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{l} 12. \quad \begin{array}{l} \xrightarrow{2} 2x + 3y = 4 \\ \xrightarrow{3} 3x - 2y = 5 \end{array} \\ \begin{array}{l} \xrightarrow{4} 4x + 6y = 8 \\ \xrightarrow{9} 9x - 6y = 15 \end{array} \\ \hline \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the  $y$  terms are opposite. Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}} 2x + 3y = 4 \\ \overset{3}{\color{blue}} 3x - 2y = 5 \end{array} \\ \color{red}{\rightarrow} 4x + 6y = 8 \\ \color{blue}{\rightarrow} 9x - 6y = 15 \\ \hline 13x \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the  $y$  terms are opposite. Add the equations.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}} 2x + 3y = 4 \\ \overset{3}{\color{blue}} 3x - 2y = 5 \end{array} \\ \color{red}{\rightarrow} 4x + 6y = 8 \\ \color{blue}{\rightarrow} 9x - 6y = 15 \\ \hline 13x = 23 \end{array}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the  $y$  terms are opposite. Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}} 2x + 3y = 4 \\ \overset{3}{\color{blue}} 3x - 2y = 5 \end{array} \\ \color{red}{\rightarrow} 4x + 6y = 8 \\ \color{blue}{\rightarrow} 9x - 6y = 15 \\ \hline 13x = 23 \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}} 2x + 3y = 4 \\ \overset{3}{\color{blue}} 3x - 2y = 5 \end{array} \\ \color{red}{\rightarrow} 4x + 6y = 8 \\ \color{blue}{\rightarrow} 9x - 6y = 15 \\ \hline 13x = 23 \end{array}$$

$$x = \frac{23}{13}$$

To solve for  $x$ , we must eliminate the  $y$  terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the  $y$  terms are opposite.

Add the equations.

Now, solve for  $x$ .

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}} 2x + 3y = 4 \\ \overset{3}{\color{blue}} 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}{\rightarrow} 4x + 6y = 8 \\ \color{blue}{\rightarrow} 9x - 6y = 15 \end{array} \\ \hline 13x = 23 \\ \\ x = \frac{23}{13} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

## Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}} 2x + 3y = 4 \\ \overset{3}{\color{blue}} 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}{\rightarrow} 4x + 6y = 8 \\ \color{blue}{\rightarrow} 9x - 6y = 15 \end{array} \\ \hline 13x = 23 \\ \\ x = \frac{23}{13} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rule{1.5cm}{0.4pt} \rightarrow 4x + 6y = 8 \\ \color{blue}\rule{1.5cm}{0.4pt} \rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array}$$
$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rule{1.5cm}{0.4pt} \rightarrow 4x + 6y = 8 \\ \color{blue}\rule{1.5cm}{0.4pt} \rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{blue}\rule{1.5cm}{0.4pt} \rightarrow 4x + 6y = 8 \\ \color{blue}\rule{1.5cm}{0.4pt} \rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \quad \begin{array}{l} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \color{red}\rule{1.5cm}{0.4pt} \rightarrow 6x + 9y \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rule{1.5cm}{0.4pt} \rightarrow 4x + 6y = 8 \\ \color{blue}\rule{1.5cm}{0.4pt} \rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \quad \begin{array}{l} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \color{red}\rule{1.5cm}{0.4pt} \rightarrow 6x + 9y = 12 \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{blue}\rule{1.5cm}{0.4pt} \rightarrow 4x + 6y = 8 \\ \color{blue}\rule{1.5cm}{0.4pt} \rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \quad \begin{array}{l} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \color{red}\rule{1.5cm}{0.4pt} \rightarrow 6x + 9y = 12 \end{array}$$
$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{blue}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow 4x + 6y = 8 \\ \color{blue}\rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{l} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow 6x + 9y = 12 \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow 4x + 6y = 8 \\ \color{blue}\rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \quad \begin{array}{l} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow 6x + 9y = 12 \\ \color{blue}\rightarrow -6x \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite.

Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow 4x + 6y = 8 \\ \color{blue}\rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow 6x + 9y = 12 \\ \color{blue}\rightarrow -6x + 4y \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{blue}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow 4x + 6y = 8 \\ \color{blue}\rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow 6x + 9y = 12 \\ \color{blue}\rightarrow -6x + 4y = -10 \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.



# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow 4x + 6y = 8 \\ \color{blue}\rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow 6x + 9y = 12 \\ \color{blue}\rightarrow -6x + 4y = -10 \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow \quad 4x + 6y = 8 \\ \color{blue}\rightarrow \quad 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow \quad 6x + 9y = 12 \\ \color{blue}\rightarrow \quad -6x + 4y = -10 \\ \hline \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow \quad 4x + 6y = 8 \\ \color{blue}\rightarrow \quad 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow \quad 6x + 9y = 12 \\ \color{blue}\rightarrow \quad -6x + 4y = -10 \\ \hline 13y \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite. Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rightarrow} 2x + 3y = 4 \\ \overset{3}{\color{red}\rightarrow} 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{blue}\rightarrow 4x + 6y = 8 \\ \color{blue}\rightarrow 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \begin{array}{l} \overset{3}{\color{red}\rightarrow} 6x + 9y = 12 \\ \overset{-2}{\color{blue}\rightarrow} -6x + 4y = -10 \\ \hline 13y = 2 \end{array} \end{array}$$

$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow \quad 4x + 6y = 8 \\ \color{blue}\rightarrow \quad 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \\ \color{red}\rightarrow \quad 6x + 9y = 12 \\ \color{blue}\rightarrow \quad -6x + 4y = -10 \\ \hline 13y = 2 \end{array}$$
$$x = \frac{23}{13}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

$$\begin{array}{r} 12. \quad \begin{array}{l} \overset{2}{\color{red}\rule{1.5cm}{0.4pt}} \quad 2x + 3y = 4 \\ \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \quad 3x - 2y = 5 \end{array} \\ \begin{array}{l} \color{red}\rightarrow \quad 4x + 6y = 8 \\ \color{blue}\rightarrow \quad 9x - 6y = 15 \\ \hline 13x = 23 \end{array} \end{array} \qquad \begin{array}{r} \begin{array}{l} \overset{3}{\color{red}\rule{1.5cm}{0.4pt}} \\ \overset{-2}{\color{blue}\rule{1.5cm}{0.4pt}} \end{array} \\ \begin{array}{l} \color{red}\rightarrow \quad 6x + 9y = 12 \\ \color{blue}\rightarrow \quad -6x + 4y = -10 \\ \hline 13y = 2 \end{array} \end{array}$$

$x = \frac{23}{13}$                        $y = \frac{2}{13}$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12.

$$\begin{array}{r} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$

Diagram showing multiplication factors: 2 for the first equation, 3 for the second equation. Red arrows point from these factors to the equations. Blue arrows point from the equations to the resulting equations below.

$$\begin{array}{r} 4x + 6y = 8 \\ 9x - 6y = 15 \\ \hline 13x = 23 \end{array}$$
$$x = \frac{23}{13}$$
$$\begin{array}{r} 6x + 9y = 12 \\ -6x + 4y = -10 \\ \hline 13y = 2 \end{array}$$
$$y = \frac{2}{13}$$

The solutions are shown in a yellow box:

$$\begin{array}{l} x = \frac{23}{13} \\ y = \frac{2}{13} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

Notice that the y terms are opposite. Add the equations.

Now, solve for x.

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.

# Algebra I Class Worksheet #3 Unit 9 Solutions

Solve each of the following systems of equations using the **multiplication-addition method**.

12. 
$$\begin{array}{r} 2x + 3y = 4 \\ 3x - 2y = 5 \end{array}$$

*(Diagram showing multiplication factors: 2 for the top equation, 3 for the bottom equation, and -2 for the bottom equation.)*

$$\begin{array}{l} x = \frac{23}{13} \\ y = \frac{2}{13} \end{array}$$

To solve for x, we must eliminate the y terms.

Multiply both sides of the top equation by 2.

Multiply both sides of the bottom equation by 3.

**Good luck on your homework !!**

$$x = \frac{23}{13}$$

$$y = \frac{2}{13}$$

To solve for y, we must eliminate the x terms.

Multiply both sides of the top equation by 3.

Multiply both sides of the bottom equation by -2.

Notice that the x terms are opposite.

Add the equations.

Now, solve for y.



