Algebra I Lesson \#3 Unit 12 Class Worksheet \#3
For Worksheets \#4 - \#6

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

Represent all unknowns in terms of the same variable.

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Represent all unknowns in terms of the same variable.

1. One number is one more than two times another. Their product is 15 . What are the numbers?
$\mathbf{x}$

Represent all unknowns in terms of the same variable.

1. One number is one more than two times another. Their product is 15 . What are the numbers?

2x

Represent all unknowns in terms of the same variable.

1. One number is one more than two times another. Their product is 15 . What are the numbers?
$\underset{2 \mathrm{x}+}{\mathbf{x}}$

Represent all unknowns in terms of the same variable.

1. One number is one more than two times another. Their product is 15 . What are the numbers?
```
    x
2x+1
```

Represent all unknowns in terms of the same variable.

1. One number is one more than two times another. Their product is 15 . What are the numbers?
$\stackrel{\mathrm{x}}{2 \mathrm{x}+1}$

Represent all unknowns in terms of the same variable.

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?
$\underset{2 x+1}{ }$

Represent all unknowns in terms of the same variable. Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC

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$\stackrel{\mathrm{x}}{2 \mathrm{x}+1}$

Represent all unknowns in terms of the same variable. Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC

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$\stackrel{\mathrm{x}}{2 \mathrm{x}+1}$

Represent all unknowns in terms of the same variable. Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}(\mathbf{2 x}+\mathbf{1}) \\
\mathbf{2 x}+\mathbf{1} &
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
x \quad x(2 x+1)=15
$$

Represent all unknowns in terms of the same variable. Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
x \quad x(2 x+1)=15
$$

Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}(2 x+1)=15 \\
2 x+1 &
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}(2 x+1)=15 \\
2 x+1 & 2 x^{2}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}(2 x+1)=15 \\
2 x+1 & 2 x^{2}+x
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}(2 x+1)=15 \\
2 x+1 & 2 x^{2}+x-15
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cr}
\mathbf{x} & \mathbf{x}(\mathbf{2 x}+1)=\mathbf{1 5} \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=\mathbf{0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}(\mathbf{x}+1)=\mathbf{1 5} \\
\mathbf{2 x}+\mathbf{1} & 2 \mathbf{x}^{2}+\mathbf{x}-\mathbf{1 5}=\mathbf{0} \\
& (\mathbf{2 x} \quad)(\mathbf{x} \quad)=\mathbf{0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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$$
\begin{array}{cc}
\mathrm{x} & \mathbf{x}(2 \mathrm{x}+1)=\mathbf{1 5} \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-\mathbf{5})(\mathrm{x}+3)=\mathbf{0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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\begin{array}{cc}
\mathrm{x} & \mathbf{x}(2 \mathrm{x}+1)=\mathbf{1 5} \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}(2 x+1)=15 \\
2 x^{2}+1 & 2 x^{2}+x-15=0 \\
& (2 x-5)(x+3)=0 \\
& 2 x-5=0 \text { or }
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
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1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
x & x(2 x+1)=15 \\
2 x+1 & 2 x^{2}+x-15=0 \\
& (2 x-5)(x+3)=0 \\
& 2 x-5=0 \text { or } x+3=0 \\
& 2 x=
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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$$
\begin{array}{cc}
x & x(2 x+1)=15 \\
2 x+1 & 2 x^{2}+x-15=0 \\
& (2 x-5)(x+3)=0 \\
& 2 x-5=0 \text { or } x+3=0 \\
& 2 x=5
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=\mathbf{1 5} \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
& 2 \mathrm{x}=5 \\
& \mathrm{x}=
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

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\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
& 2 \mathrm{x}=5 \\
& \mathrm{x}=2.5
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

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\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
& 2 \mathrm{x}=5 \\
& \mathrm{x}=2.5 \text { or }
\end{array}
$$

Represent all unknowns in terms of the same variable.
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Solve the equation.

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\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
& 2 \mathrm{x}=5 \\
& \mathrm{x}=2.5 \text { or } \mathrm{x}=
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

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\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=\mathbf{1 5} \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
& 2 \mathrm{x}=5 \\
& \mathrm{x}=2.5 \text { or } \mathrm{x}=-3
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

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\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
& 2 \mathrm{x}=5 \\
& \mathrm{x}=2.5 \text { or } \mathrm{x}=-3
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
2 \mathrm{x}=5 \\
& \mathrm{x}=2.5 \text { or } \mathrm{x}=-3 \\
& 2 \mathrm{x}+1=
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
& 2 \mathrm{x}-5=0 \text { or } \mathrm{x}+3=0 \\
& 2 \mathrm{x}=5 \\
& \mathrm{x}=2.5 \text { or } \mathrm{x}=-3 \\
& 2 \mathrm{x}+1=6
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
2 \mathrm{x}-5=0 & \text { or } \mathrm{x}+3=0 \\
2 \mathrm{x}=5 & \\
& \mathrm{x}=2.5 \quad \text { or } \mathrm{x}=-3 \\
& 2 \mathrm{x}+1=6 \quad 2 \mathrm{x}+1=
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?

$$
\begin{array}{cc}
\mathrm{x} & \mathrm{x}(2 \mathrm{x}+1)=15 \\
2 \mathrm{x}+1 & 2 \mathrm{x}^{2}+\mathrm{x}-15=0 \\
& (2 \mathrm{x}-5)(\mathrm{x}+3)=0 \\
2 \mathrm{x}-5=0 & \text { or } \mathrm{x}+3=0 \\
2 \mathrm{x}=5 & \\
& \mathrm{x}=2.5 \quad \text { or } \mathrm{x}=-3 \\
& 2 \mathrm{x}+1=6 \quad 2 \mathrm{x}+1=-5
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?
$\stackrel{\mathrm{x}}{2 \mathrm{x}+1}$

$$
\begin{gathered}
x(2 x+1)=15 \\
2 x^{2}+x-15=0 \\
(2 x-5)(x+3)=0 \\
2 x-5=0 \text { or } x+3=0 \\
2 x=5 \\
x=2.5 \quad \text { or } x=-3 \\
2 x+1=6 \quad 2 x+1=-5
\end{gathered}
$$

The numbers are 2.5 and 6 or - $\mathbf{3}$ and $\mathbf{- 5}$.

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

1. One number is one more than two times another. Their product is 15 . What are the numbers?
$\stackrel{\mathbf{x}}{2 \mathrm{x}+1}$

$$
\begin{gathered}
x(2 x+1)=15 \\
2 x^{2}+x-15=0 \\
(2 x-5)(x+3)=0 \\
2 x-5=0 \text { or } x+3=0 \\
2 x=5 \\
x=2.5 \quad \text { or } x=-3 \\
2 x+1=6 \quad 2 x+1=-5
\end{gathered}
$$

The numbers are 2.5 and 6 or - $\mathbf{3}$ and $\mathbf{- 5}$.

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).
Check your solution.

Algebra I Class Worksheet \#3 Unit 12 RESAC
2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

Represent all unknowns in terms of the same variable.

Algebra I Class Worksheet \#3 Unit 12 RESAC
2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 2. One number is equal to the square of another. Their sum is 20 . What are the numbers? 

$\mathbf{x}$

Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 2. One number is equal to the square of another. Their sum is 20 . What are the numbers? 

```
X
x 
```

Represent all unknowns in terms of the same variable.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?
$\mathbf{x}$
$\mathbf{x}^{2}$

Represent all unknowns in terms of the same variable.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

## $\mathbf{x}$ <br> $\mathbf{x}^{2}$

Represent all unknowns in terms of the same variable. Write an Equation.
2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

```
X
x 
```

Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

| $\mathbf{X}$ | $\mathbf{X}$ |
| :--- | :--- |
| $\mathbf{X}^{2}$ |  |

Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

| $\mathbf{X}$ | $\mathbf{X}+$ |
| :--- | :--- |
| $\mathbf{x}^{2}$ |  |

Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

| $\mathbf{x}$ | $\mathbf{x}+\mathbf{x}^{2}$ |
| :--- | :--- |
| $\mathbf{X}^{2}$ |  |

Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?
$\mathbf{x} \quad \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0}$
$\mathbf{x}^{2}$

Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?
$\mathbf{x} \quad \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0}$
$\mathbf{x}^{2}$

Represent all unknowns in terms of the same variable. Write an Equation.

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2. One number is equal to the square of another. Their sum is 20 . What are the numbers?
$\mathrm{x} \quad \mathrm{x}+\mathrm{x}^{\mathbf{2}}=\mathbf{2 0}$
$\mathbf{x}^{2}$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{ll}
\mathbf{x} & \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{ll}
\mathbf{x} & \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}+\mathbf{x}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
\mathbf{x} & \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}+\mathbf{x}-\mathbf{2 0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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$$
\begin{array}{lc}
\mathbf{x} & \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}+\mathbf{x}-\mathbf{2 0}=\mathbf{0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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$$
\begin{array}{lc}
\mathbf{x} & \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}+\mathbf{x}-\mathbf{2 0}=\mathbf{0} \\
& (\mathbf{x} \quad)(\mathbf{x} \quad)=\mathbf{0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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$$
\begin{array}{lc}
\mathbf{x} & \mathbf{x}+\mathrm{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}+\mathbf{x}-\mathbf{2 0}=\mathbf{0} \\
& (\mathrm{x}-4)(\mathrm{x}+5)=\mathbf{0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
\mathrm{x} & \mathrm{x}+\mathrm{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}+\mathbf{x}-\mathbf{2 0}=\mathbf{0} \\
& (\mathbf{x}-\mathbf{4})(\mathbf{x}+\mathbf{5})=\mathbf{0} \\
& x-4=0
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
x & x+x^{2}=20 \\
\mathbf{x}^{2} & x^{2}+x-20=0 \\
& (x-4)(x+5)=0 \\
& x-4=0 \text { or }
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

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2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

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\begin{array}{lc}
\mathbf{x} & \mathbf{x}+\mathbf{x}^{2}=\mathbf{2 0} \\
\mathbf{x}^{2} & \mathbf{x}^{2}+\mathrm{x}-\mathbf{2 0}=\mathbf{0} \\
& (\mathrm{x}-4)(\mathrm{x}+5)=0 \\
& \mathrm{x}-\mathbf{4}=\mathbf{0} \text { or } \mathrm{x}+5=\mathbf{0}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
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$$
\begin{array}{lc}
\mathrm{x} & \mathrm{x}+\mathrm{x}^{2}=20 \\
\mathbf{x}^{2} & x^{2}+\mathrm{x}-20=0 \\
(x-4)(x+5)=0 \\
& x-4=0 \text { or } x+5=0 \\
& x=4
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.

Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
\mathbf{x} & x+x^{2}=20 \\
\mathbf{x}^{2} & x^{2}+x-20=0 \\
(x-4)(x+5)=0 \\
& x-4=0 \text { or } x+5=0 \\
& x=4 \text { or }
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.

Solve the equation.

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\begin{array}{lc}
\mathrm{x} & \mathrm{x}+\mathrm{x}^{2}=20 \\
\mathrm{x}^{2} & \mathrm{x}^{2}+\mathrm{x}-20=0 \\
(\mathrm{x}-4)(\mathrm{x}+5)=0 \\
& \mathrm{x}-4=0 \text { or } \mathrm{x}+5=0 \\
& \mathrm{x}=4 \text { or } \mathrm{x}=-5
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
\mathrm{x} & \mathrm{x}+\mathrm{x}^{2}=20 \\
\mathrm{x}^{2} & \mathrm{x}^{2}+\mathrm{x}-20=0 \\
& (\mathrm{x}-4)(\mathrm{x}+5)=0 \\
& \mathrm{x}-4=0 \text { or } \mathrm{x}+5=0 \\
& \mathrm{x}=4 \text { or } \mathrm{x}=-5
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
x & x+x^{2}=20 \\
\mathbf{x}^{2} & x^{2}+x-20=0 \\
(x-4)(x+5)=0 \\
x-4=0 & \text { or } x+5=0 \\
& x=4 \text { or } x=-5 \\
& x^{2}=
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
x & x+x^{2}=20 \\
x^{2} & x^{2}+x-20=0 \\
& (x-4)(x+5)=0 \\
& x-4=0 \text { or } x+5=0 \\
& x=4 \text { or } x=-5 \\
& x^{2}=16
\end{array}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{lc}
\mathbf{x} & x+x^{2}=20 \\
\mathbf{x}^{2} & x^{2}+x-20=0 \\
(x-4)(x+5)=0 \\
x-4=0 & \text { or } \quad x+5=0 \\
& x=4 \quad \text { or } \quad x=-5 \\
& x^{2}=16
\end{array} x^{2}=
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{cc}
x & x+x^{2}=20 \\
x^{2} & x^{2}+x-20=0 \\
& (x-4)(x+5)=0 \\
& x-4=0 \text { or } x+5=0 \\
& x=4 \quad \text { or } \quad x=-5 \\
& x^{2}=16 \quad x^{2}=\mathbf{2 5}
\end{array}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{array}{cc}
x & x+x^{2}=20 \\
x^{2} & x^{2}+x-20=0 \\
& (x-4)(x+5)=0 \\
& x-4=0 \text { or } x+5=0 \\
& x=4 \quad \text { or } \quad x=-5 \\
& \mathbf{x}^{2}=16 \quad x^{2}=\mathbf{2 5}
\end{array}
$$

The numbers are 4 and 16 or -5 and 25.

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

2. One number is equal to the square of another. Their sum is 20 . What are the numbers?

$$
\begin{aligned}
& x \quad x+x^{2}=20 \\
& \mathbf{x}^{2} \\
& x^{2}+x-20=0 \\
& (x-4)(x+5)=0 \\
& x-4=0 \text { or } x+5=0 \\
& x=4 \text { or } x=-5 \\
& x^{2}=16 \quad x^{2}=25
\end{aligned}
$$

The numbers are 4 and 16
or -5 and 25.

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).
Check your solution.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

Algebra I Class Worksheet \#3 Unit 12 RESAC
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Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width.

The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
\mathbf{x}(2 x-1)
$$



Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width.

The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
x(2 x-1)=36
$$



Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
x(2 x-1)=36
$$



Represent all unknowns in terms of the same variable. Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
x(2 x-1)=36
$$



Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
x(2 x-1)=36
$$



$$
2 \mathbf{x}^{2}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?


$$
x(2 x-1)=36
$$

$$
2 x^{2}-x
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$

$$
\begin{aligned}
& x(2 x-1)=36 \\
& 2 x^{2}-x-36
\end{aligned}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$

$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$

$$
\begin{aligned}
& x(2 x-1)=36 \\
& 2 \mathrm{x}^{2}-\mathrm{x}-36=0 \\
& \text { (2x } \quad \text { )( } \mathrm{x} \quad)=\mathbf{0}
\end{aligned}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$

$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or }
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or }
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or } x=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or } x=-4
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or } x=-4
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or } x=-
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or } x=- \\
2 x-1=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).
3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \quad \text { or } x= \\
2 x-1=8
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or } x=-1 \\
2 x-1=8
\end{gathered}
$$

The rectangle is 8 inches long and 4.5 inches wide.

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

3. The length of a rectangle is one inch less than twice its width. The area of the rectangle is $\mathbf{3 6}$ square inches. What are the dimensions of the rectangle?

$$
2 x-1
$$



$$
\begin{gathered}
x(2 x-1)=36 \\
2 x^{2}-x-36=0 \\
(2 x-9)(x+4)=0 \\
2 x-9=0 \text { or } x+4=0 \\
2 x=9 \\
x=9 / 2 \text { or } x=-1 \\
2 x-1=8
\end{gathered}
$$

The rectangle is $\mathbf{8}$ inches long and 4.5 inches wide.

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).
Check your solution.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.
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Represent all unknowns in terms of the same variable.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.

Represent all unknowns in terms of the same variable.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


Represent all unknowns in terms of the same variable.
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of the same variable.
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Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\mathbf{x}^{2}+
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

I applied the Pythagorean Theorem.

Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
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$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

$$
\mathbf{x}^{2}+
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

$$
\mathbf{x}^{2}+
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
x^{2}+(x+7)^{2}=(2 x+3)^{2}
$$

$$
x^{2}+x^{2}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{aligned}
& x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
& x^{2}+x^{2}+14 x
\end{aligned}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{aligned}
& x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
& x^{2}+x^{2}+14 x+49
\end{aligned}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{aligned}
& x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
& x^{2}+x^{2}+14 x+49
\end{aligned}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{aligned}
& x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
& x^{2}+x^{2}+14 x+49
\end{aligned}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=
\end{gathered}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is $\mathbf{3}$ inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}
\end{gathered}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x
\end{gathered}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9
\end{gathered}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9
\end{gathered}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{aligned}
& x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
& x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
& 2 x^{2}
\end{aligned}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49
\end{gathered}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9
\end{gathered}
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20
\end{gathered}
$$

$$
(\mathbf{x} \quad)(\mathrm{x} \quad)=\mathbf{0}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
\mathrm{~ms} \quad \mathrm{x}+4=0
\end{gathered}
$$ of the same variable. Write an Equation.

Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
\mathbf{x}^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
m s \quad x+4=0 \text { or }
\end{gathered}
$$ of the same variable. Write an Equation.

Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
m s \quad x+4=0 \text { or } x-5=0
\end{gathered}
$$ of the same variable. Write an Equation.

Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


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\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
m s \quad x+4=0 \text { or } x-5=0 \\
x=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
m s \quad x+4=0 \text { or } x-5=0 \\
x=-4
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
m s \quad x+4=0 \text { or } x-5=0 \\
x=-4 \text { or }
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
m s \quad x+4=0 \text { or } x-5=0 \\
x=-4 \text { or } x=
\end{gathered}
$$

Represent all unknowns in terms of the same variable.

Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0 \\
m s \quad x+4=0 \text { or } x-5=0 \\
x=-4 \text { or } x=5
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable.

$$
x+4=0 \text { or } x-5=0
$$

Write an Equation.

$$
x=-4 \quad \text { or } \quad x=5
$$

Solve the equation.
Answer the question (complete sentence).
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.

$$
\begin{aligned}
& x+4=0 \text { or } x-5=0 \\
& x-4 \text { or } x=5
\end{aligned}
$$

Solve the equation.
Answer the question (complete sentence).
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
$x+4=0$ or $x-5=0$
$x>-4$ or $x=5$
$x+7=$

Answer the question (complete sentence).
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
$x+4=0$ or $x-5=0$
$x>-4$ or $x=5$
$\mathrm{x}+7=12$

Answer the question (complete sentence).
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).
$x+4=0$ or $x-5=0$
$x>-4$ or $x=5$
$x+7=12$
$2 \mathrm{x}+3=$
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40 \\
0=x^{2}-x-20 \\
(x+4)(x-5)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).
$x+4=0$ or $x-5=0$
$x>-4$ or $x=5$
$x+7=12$
$2 \mathrm{x}+3=13$
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40
\end{gathered}
$$

$$
0=x^{2}-x-20
$$

$$
(x+4)(x-5)=0
$$

$$
x+4=0 \text { or } x-5=0
$$

$$
x>-4 \text { or } x=5
$$

Solve the equation.

$$
x+7=12
$$

Answer the question (complete sentence).
$2 \mathrm{x}+3=13$
4. The length of the hypotenuse of a right triangle is 3 inches more than twice the length of the shorter leg. The longer leg is 7 inches longer than the shorter leg. Find the length of each side.


$$
\begin{gathered}
x^{2}+(x+7)^{2}=(2 x+3)^{2} \\
x^{2}+x^{2}+14 x+49=4 x^{2}+12 x+9 \\
2 x^{2}+14 x+49=4 x^{2}+12 x+9 \\
0=2 x^{2}-2 x-40
\end{gathered}
$$

$$
0=x^{2}-x-20
$$

$$
(x+4)(x-5)=0
$$

$$
x+4=0 \text { or } x-5=0
$$

$$
x>-4 \text { or } x=5
$$

Solve the equation.

$$
x+7=12
$$

Answer the question (complete sentence).
$2 \mathrm{x}+3=13$
Check your solution.

Algebra I Class Worksheet \#3 Unit 12 RESAC
5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{aligned}
& \text { Algebra I Class Worksheet \#3 Unit } 12 \text { RESAC } \\
& \text { 5. Find two consecutive odd integers whose product } \\
& \text { is one less than three times their sum. }
\end{aligned}
$$

Represent all unknowns in terms of the same variable.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum.

Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. 

## $\mathbf{X}$

Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. 

$$
\mathbf{x}^{\mathbf{X}}
$$

Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. 

$$
\begin{array}{r}
\mathbf{x} \\
\mathbf{x}+
\end{array}
$$

Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. 

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.

$$
\begin{aligned}
& \text { Algebra I Class Worksheet \#3 Unit } 12 \text { RESAC } \\
& \text { 5. Find two consecutive odd integers whose product } \\
& \text { is one less than three times their sum. } \\
& \qquad \begin{array}{l}
x \\
x+2
\end{array}
\end{aligned}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.

$$
\begin{aligned}
& \text { Algebra I Class Worksheet \#3 Unit } 12 \text { RESAC } \\
& \text { 5. Find two consecutive odd integers whose product } \\
& \text { is one less than three times their sum. } \\
& x \\
& x+2
\end{aligned}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} \mathbf{x} \\ \mathbf{x}+2 \end{gathered}
$$ <br> Product:

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> x <br> $x+2$ <br> Product: x(

Represent all unknowns in terms
of the same variable.
Write an Equation.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} \mathbf{x} \\ \mathbf{x}+2 \end{gathered}
$$ <br> Product: $\mathbf{x}(\mathrm{x}+2)$ 

Represent all unknowns in terms
of the same variable.
Write an Equation.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} \mathbf{x} \\ \mathbf{x}+2 \end{gathered}
$$ <br> Product: $x(x+2)=$ 

Represent all unknowns in terms of the same variable.
Write an Equation.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} x \\ x+2 \\ \text { Product: } x(x+2)=x^{2} \end{gathered}
$$ <br> <br> Product: $x(x+2)=x^{2}$ 

 <br> <br> Product: $x(x+2)=x^{2}$}

Represent all unknowns in terms of the same variable.
Write an Equation.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} \mathbf{x} \\ \mathbf{x}+2 \end{gathered}
$$ <br> Product: $\mathbf{x}(x+2)=x^{2}+$ 

Represent all unknowns in terms of the same variable.
Write an Equation.

$$
\begin{aligned}
& \text { Algebra I Class Worksheet \#3 Unit } 12 \text { RESAC } \\
& \text { 5. Find two consecutive odd integers whose product } \\
& \text { is one less than three times their sum. } \\
& x \\
& x+2 \\
& \text { Product: } x(x+2)=x^{2}+2 x
\end{aligned}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. 

$$
\begin{gathered}
x \\
x+2 \\
\text { Product: } x(x+2)=x^{2}+2 x
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} x \\ x+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} x \\ x+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$ <br> Sum:

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} \mathbf{x} \\ \mathbf{x}+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$ <br> Sum: $x$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} x \\ x+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$ <br> Sum: $\mathbf{x}+$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} x \\ x+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$ <br> Sum: $x+(x+2)$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} x \\ x+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$ <br> Sum: $x+(x+2)=$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} x \\ x+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$ <br> Sum: $x+(x+2)=2 x$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. <br> $$
\begin{gathered} \mathbf{x} \\ \mathbf{x}+2 \end{gathered}
$$ <br> Product: $x(x+2)=x^{2}+2 x$ <br> Sum: $x+(x+2)=2 x+$

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. 

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms
of the same variable.
Write an Equation.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum. 

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

$$
\mathbf{x}^{2}+2 \mathbf{x}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

$$
x^{2}+2 x=
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

$$
x^{2}+2 x=
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

$$
\begin{aligned}
& \text { Algebra I Class Worksheet \#3 Unit } 12 \text { RESAC } \\
& \text { 5. Find two consecutive odd integers whose product } \\
& \text { is one less than three times their sum. } \\
& \qquad \begin{array}{c}
x \\
x+2
\end{array} x^{2}+2 x=3(
\end{aligned}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

$$
\begin{aligned}
& \text { Algebra I Class Worksheet \#3 Unit } 12 \text { RESAC } \\
& \text { 5. Find two consecutive odd integers whose product } \\
& \text { is one less than three times their sum. } \\
& \qquad \begin{array}{l}
x \\
x+2
\end{array} x^{2}+2 x=3(2 x+2)
\end{aligned}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

$$
\begin{aligned}
& \text { Algebra I Class Worksheet \#3 Unit } 12 \text { RESAC } \\
& \text { 5. Find two consecutive odd integers whose product } \\
& \text { is one less than three times their sum. } \\
& \qquad \begin{array}{l}
x \\
x+2
\end{array} x^{2}+2 x=3(2 x+2)-1
\end{aligned}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}^{2}+2 \mathbf{x}=3(2 x+2)-1
\end{array}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{array}{cc}
\mathbf{x} & \mathbf{x}^{2}+2 \mathbf{x}=3(2 x+2)-1
\end{array}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{array}{cl}
\mathbf{x} & x^{2}+2 x=3(2 x+2)-1 \\
x+2 & x^{2}+2 x=
\end{array}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{array}{cl}
\mathbf{x} & x^{2}+2 x=3(2 x+2)-1 \\
x+2 & x^{2}+2 x=6 x
\end{array}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{array}{ll}
\mathbf{x} & x^{2}+2 x=3(2 x+2)-1 \\
x+2 & x^{2}+2 x=6 x+6
\end{array}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{array}{cl}
\mathbf{x} & \mathbf{x}^{2}+2 x=3(2 x+2)-1 \\
x+2 & x^{2}+2 x=6 x+6-1
\end{array}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
x+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1
\end{aligned}
$$

$$
x^{2}+2 x=
$$

Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
x+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1 \\
& x^{2}+2 x=6 x
\end{aligned}
$$

Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
x+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1 \\
& x^{2}+2 x=6 x+5
\end{aligned}
$$

Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1 \\
& x^{2}+2 x=6 x+5 \\
& \quad x^{2}-4 x
\end{aligned}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
x+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x \quad)(x \quad)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
x+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0 \text { or }
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0 \text { or } x+1=0
\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0 \text { or } x+1=0
\end{gathered}
$$

$$
\mathbf{x}=
$$ of the same variable.

Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1 \\
& x^{2}+2 x=6 x+5 \\
& x^{2}-4 x-5=0 \\
& (x-5)(x+1)=0 \\
& x-5=0 \text { or } x+1=0 \\
& x=5
\end{aligned}
$$

of the same variable.
Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1 \\
& x^{2}+2 x=6 x+5 \\
& x^{2}-4 x-5=0 \\
& (x-5)(x+1)=0 \\
& x-5=0 \text { or } x+1=0 \\
& x=5 \text { or }
\end{aligned}
$$ of the same variable.

Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1 \\
& x^{2}+2 x=6 x+5 \\
& x^{2}-4 x-5=0 \\
& (x-5)(x+1)=0 \\
& x-5=0 \text { or } x+1=0 \\
& x=5 \text { or } x=
\end{aligned}
$$ of the same variable.

Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0 \text { or } x+1=0 \\
x=5 \text { or } x=-1
\end{gathered}
$$ of the same variable.

Write an Equation.
Solve the equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
x \\
\mathbf{x}+2
\end{gathered}
$$

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1
\end{aligned}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms

$$
\begin{gathered}
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0 \text { or } x+1=0
\end{gathered}
$$

$$
x=5 \quad \text { or } \quad x=-1
$$ of the same variable.

Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

$$
\begin{gathered}
x^{2}+2 x=3(2 x+2)-1 \\
x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0 \text { or } x+1=0 \\
x=5 \text { or } x=-1 \\
x+2=
\end{gathered}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

5. Find two consecutive odd integers whose product is one less than three times their sum.

$$
\begin{gathered}
\mathbf{x} \\
\mathbf{x}+2
\end{gathered}
$$

$$
\begin{aligned}
& x^{2}+2 x=3(2 x+2)-1 \\
& x^{2}+2 x=6 x+6-1 \\
& x^{2}+2 x=6 x+5 \\
& x^{2}-4 x-5=0 \\
& (x-5)(x+1)=0 \\
& x-5=0 \text { or } x+1=0 \\
& x=5 \text { or } x=-1 \\
& x+2=7
\end{aligned}
$$

Product: $x(x+2)=x^{2}+2 x$
Sum: $x+(x+2)=2 x+2$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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$$
\begin{gathered}
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\end{gathered}
$$

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\begin{gathered}
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x^{2}+2 x=6 x+6-1 \\
x^{2}+2 x=6 x+5 \\
x^{2}-4 x-5=0 \\
(x-5)(x+1)=0 \\
x-5=0 \text { or } x+1=0 \\
x=5 \quad \text { or } \quad x=-1 \\
x+2=7 \quad x+2=
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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x-5=0 \text { or } x+1=0 \\
x=5 \quad \text { or } \quad x=-1 \\
x+2=7 \quad x+2=1
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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\end{gathered}
$$

Represent all unknowns in terms of the same variable.
Write an Equation.
Solve the equation.
Answer the question (complete sentence).

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(x-5)(x+1)=0 \\
x-5=0 \text { or } x+1=0 \\
x=5 \quad \text { or } \quad x=-1 \\
x+2=7 \quad x+2=1
\end{gathered}
$$

Represent all unknowns in terms of the same variable. Write an Equation.
Solve the equation.
Answer the question (complete sentence).
Check your solution.

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

## Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

Represent all unknowns in terms of the same variable.

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Represent all unknowns in terms of the same variable.

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Represent all unknowns in terms of the same variable.

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Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width? 



Represent all unknowns in terms of the same variable.

# Algebra I Class Worksheet \#3 Unit 12 RESAC <br> 6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is $\mathbf{3 3 6}$ square feet, then what is its width? 



Represent all unknowns in terms of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms
of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
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Represent all unknowns in terms
of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
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Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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Represent all unknowns in terms
of the same variable.
Write an Equation.

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Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

( $2 \mathrm{x}+\mathbf{3 0}$ )

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)$

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$$
2 x+20
$$

$$
(2 x+30)(2 x+20)=
$$

This represents the area of the larger rectangle.

Represent all unknowns in terms
of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


$$
(2 x+30)(2 x+20)=600
$$

This represents the area of the larger rectangle, which includes the garden ( 600 square feet)

Represent all unknowns in terms
of the same variable.
Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

This represents the area of the larger rectangle, which includes the garden ( 600 square feet) and the path ( $\mathbf{3 3 6}$ square feet).

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$$
2 x+30
$$

$$
(2 x+30)(2 x+20)=600+336
$$

Represent all unknowns in terms
of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem.

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem.
Focus on the path only.

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem.
Focus on the path only. It can be divided into 4 squares

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem.
Focus on the path only. It can be divided into 4 squares

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles.

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?

$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles. The total area is

Represent all unknowns in terms of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area


Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

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6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area


Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles. The total area is

$$
4 x^{2}+
$$

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles. The total area is

$$
4 x^{2}+40 x
$$

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Represent all unknowns in terms of the same variable.
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$$

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Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles. The total area is

$$
4 x^{2}+40 x+60 x
$$

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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Represent all unknowns in terms of the same variable.
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$$

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There is another way of deriving an equation for this problem. Focus on the path only. It can be divided into 4 squares and 4 rectangles. The total area is

$$
4 x^{2}+40 x+60 x=336
$$

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms of the same variable.
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$$
4 x^{2}+40 x+60 x=336
$$

of the same variable.
Write an Equation.

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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$$
2 x+20
$$

$$
2 x+30
$$

Represent all unknowns in terms

$$
4 x^{2}+40 x+60 x=336
$$

of the same variable.
Write an Equation.

$$
(2 x+30)(2 x+20)=600+336
$$

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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Represent all unknowns in terms of the same variable.
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(2 x+30)(2 x+20)=600+336
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$$

## Algebra I Class Worksheet \#3 Unit 12 RESAC

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Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$ $4 \mathrm{x}^{\mathbf{2}}$

$$
4 x^{2}+40 x+60 x=336
$$

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms of the same variable.
Write an Equation.

$$
(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+100 x
$$

$$
4 x^{2}+40 x+60 x=336
$$

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


$$
4 x^{2}+100 x+600
$$

Represent all unknowns in terms

$$
(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+40 x+60 x=336
$$

Write an Equation.
These equations are equivalent !!

## Algebra I Class Worksheet \#3 Unit 12 RESAC

6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


$$
4 x^{2}+100 x+600=936
$$

Represent all unknowns in terms

$$
(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+40 x+60 x=336
$$

Write an Equation.
These equations are equivalent !!

Algebra I Class Worksheet \#3 Unit 12 RESAC
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Represent all unknowns in terms of the same variable.
Write an Equation.

$$
(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+100 x+600=936
$$

$$
4 x^{2}
$$

$$
4 x^{2}+40 x+60 x=336
$$

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$$
4 x^{2}+100 x+600=936
$$

$$
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$$

$$
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$$

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Represent all unknowns in terms of the same variable.
Write an Equation.

$$
(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+100 x+600=936
$$

$$
4 x^{2}+100 x-336
$$

$$
4 x^{2}+40 x+60 x=336
$$

Algebra I Class Worksheet \#3 Unit 12 RESAC
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Write an Equation.

$$
(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+100 x+600=936
$$

$$
4 x^{2}+100 x-336=0
$$

$$
4 x^{2}+40 x+60 x=336
$$

Algebra I Class Worksheet \#3 Unit 12 RESAC
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$$
(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+100 x+600=936
$$

$$
4 x^{2}+100 x-336=0
$$

Represent all unknowns in terms

$$
4 x^{2}+40 x+60 x=336
$$ of the same variable.

Write an Equation.

Algebra I Class Worksheet \#3 Unit 12 RESAC
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(2 x+30)(2 x+20)=600+336
$$

$$
4 x^{2}+100 x+600=936
$$

$$
4 x^{2}+100 x-336=0
$$

Represent all unknowns in terms

$$
4 x^{2}+40 x+60 x=336
$$

of the same variable.
Write an Equation.
These equations are equivalent !!

Algebra I Class Worksheet \#3 Unit 12 RESAC
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$$
\begin{gathered}
(2 x+30)(2 x+20)=600+336 \\
4 x^{2}+100 x+600=936 \\
4 x^{2}+100 x-336=0
\end{gathered}
$$

Represent all unknowns in terms

$$
4 x^{2}+40 x+60 x=336
$$ of the same variable.

Write an Equation.

$$
4 x^{2}
$$

These equations are equivalent !!

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

$$
4 x^{2}+100 x+600=936
$$

$$
4 x^{2}+100 x-336=0
$$

$$
4 x^{2}+40 x+60 x=336
$$

$$
4 x^{2}+100 x
$$

These equations are equivalent !!

Algebra I Class Worksheet \#3 Unit 12 RESAC
6. A rectangular garden 30 feet long and 20 feet wide is surrounded by a rock path of uniform width. If the area of the path is 336 square feet, then what is its width?


Represent all unknowns in terms of the same variable.
Write an Equation.
$(2 x+30)(2 x+20)=600+336$

$$
4 x^{2}+100 x+600=936
$$

$$
4 x^{2}+100 x-336=0
$$

$$
4 x^{2}+40 x+60 x=336
$$

$$
4 x^{2}+100 x-336
$$

These equations are equivalent !!

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Write an Equation.

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\begin{gathered}
(2 x+30)(2 x+20)=600+336 \\
4 x^{2}+100 x+600=936 \\
4 x^{2}+100 x-336=0
\end{gathered}
$$

$$
\begin{aligned}
& 4 x^{2}+40 x+60 x=336 \\
& 4 x^{2}+100 x-336=0
\end{aligned}
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These equations are equivalent !!

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$$
\mathbf{x}^{2}
$$

Represent all unknowns in terms of the same variable.
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\begin{gathered}
(2 x+30)(2 x+20)=600+336 \\
4 x^{2}+100 x+600=936 \\
4 x^{2}+100 x-336=0 \\
x^{2}+25 x
\end{gathered}
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Represent all unknowns in terms of the same variable.
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\begin{gathered}
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4 x^{2}+100 x+600=936 \\
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x^{2}+25 x-84
\end{gathered}
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(x-3)(x+28)=0
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(x-3)(x+28)=0 \\
x-3=0 \text { or }
\end{gathered}
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$$
\mathbf{x}=
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x-3=0 \text { or } x+28=0 \\
x=3
\end{gathered}
$$

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Write an Equation.
Solve the equation.
Answer the question (complete sentence).

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$$

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Write an Equation.
Solve the equation.
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x-3=0 \text { or } x+28=0 \\
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\end{gathered}
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The path is $\mathbf{3}$ feet wide.

Solve the equation.
Answer the question (complete sentence).

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Solve the equation.
Answer the question (complete sentence).
Check your solution.

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$(2 x+30)(2 x+20)=600+336$ $4 x^{2}+100 x+600=936$ 1w2 1 กñ 22K-

## Good luck on your homework !!

$(x-3)(x+28)=0$
$x-3=0$ or $x+28=0$
$x=3$ or $x=-28$
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Write an Equation.
The path is $\mathbf{3}$ feet wide.
Solve the equation.
Answer the question (complete sentence).
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