

**Algebra II**  
**Lesson #6 Unit 6**  
**Class Worksheet #6**  
**For Worksheets #8 & #9**

## Algebra II Class Worksheet #6 Unit 6 RESAC

**1. One number is 5 more than twice another. Their product is 3. What are the numbers?**

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

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2<sup>nd</sup> number:

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## Algebra II Class Worksheet #6 Unit 6 RESAC

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What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

1. One number is 5 more than twice another. Their product is 3.  
What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $2x + 5$

**R**epresent all unknowns in terms of the same variable.

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## Algebra II Class Worksheet #6 Unit 6 RESAC

1. One number is 5 more than twice another. Their product is 3.

What are the numbers?

1<sup>st</sup> number:  $x$

$$x(2x + 5)$$

2<sup>nd</sup> number:  $2x + 5$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

1. One number is 5 more than twice another. Their product is 3.

What are the numbers?

$$x(2x + 5) = 3$$

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $2x + 5$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

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What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $2x + 5$

$$x(2x + 5) = 3$$
$$2x^2$$

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Write an **E**quation.

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What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $2x + 5$

$$x(2x + 5) = 3$$

$$2x^2 + 5x$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

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$$x(2x + 5) = 3$$

$$2x^2 + 5x - 3$$

**R**epresent all unknowns in terms of the same variable.  
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$$x(2x + 5) = 3$$

$$2x^2 + 5x - 3 = 0$$

**R**epresent all unknowns in terms of the same variable.  
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$$x(2x + 5) = 3$$

$$2x^2 + 5x - 3 = 0$$

$$(2x \quad)(x \quad)$$

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$$x(2x + 5) = 3$$

$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3)$$

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$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3) = 0$$

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$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0$$

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$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or}$$

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$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

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$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x$$

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$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

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$$(2x - 1)(x + 3) = 0$$

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$$2x = 1$$

$$x =$$

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$$x(2x + 5) = 3$$

$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2$$

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$$2x^2 + 5x - 3 = 0$$

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$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or}$$

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$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x =$$

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$$2x^2 + 5x - 3 = 0$$

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$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

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$$2x^2 + 5x - 3 = 0$$

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$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

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$$2x^2 + 5x - 3 = 0$$

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$$2x - 1 = 0 \text{ or } x + 3 = 0$$

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2<sup>nd</sup> number:  $2x + 5$

$$2x^2 + 5x - 3 = 0$$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

$$2x + 5 =$$

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$$x(2x + 5) = 3$$

$$2x^2 + 5x - 3 = 0$$

2<sup>nd</sup> number:  $2x + 5$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

$$2x + 5 = 6$$

**R**epresent all unknowns in terms of the same variable.

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$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

$$2x + 5 = 6$$

$$2x + 5 = -1$$

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$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

$$2x + 5 = 6$$

$$2x + 5 = -1$$

The numbers are 0.5 and 6 or -3 and -1.

**R**epresent all unknowns in terms of the same variable.

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1<sup>st</sup> number:  $x$

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2<sup>nd</sup> number:  $2x + 5$

$$2x^2 + 5x - 3 = 0$$

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$$2x - 1 = 0 \text{ or } x + 3 = 0$$

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$$x = 1/2 \text{ or } x = -3$$

$$2x + 5 = 6 \qquad 2x + 5 = -1$$

The numbers are 0.5 and 6 or -3 and -1.

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$$2x + 5 = 6$$

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The numbers are 0.5 and 6 or -3 and -1.

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$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

$$2x + 5 = 6 \qquad 2x + 5 = -1$$

The numbers are 0.5 and 6 or -3 and -1.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

1. One number is 5 more than twice another. Their product is 3.  
What are the numbers?

1<sup>st</sup> number:  $x$

$$x(2x + 5) = 3$$

$$2x^2 + 5x - 3 = 0$$

2<sup>nd</sup> number:  $2x + 5$

$$(2x - 1)(x + 3) = 0$$

$$2x - 1 = 0 \text{ or } x + 3 = 0$$

$$2x = 1$$

$$x = 1/2 \text{ or } x = -3$$

$$2x + 5 = 6 \qquad 2x + 5 = -1$$

The numbers are 0.5 and 6 or -3 and -1.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

- R**epresent all unknowns in terms of the same variable. Write an **E**quation.
- S**olve the equation.
- A**nsWER the question (complete sentence).
- C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.



## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:

2<sup>nd</sup> number:

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another. Their product is 20.  
What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another. Their product is 20.  
What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20.  
What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20.  
What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3)$$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.



2. One number is 3 more than 5 times another another. Their product is 20.  
What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.



2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x =$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3}{\quad}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{329}}{10}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{\quad}}{\quad}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9}}{10}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 -}}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - -400}}{10}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - -400}}{10}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.



2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - -400}}{10}$$

$$x =$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - -400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$x \approx$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or}$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.



2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

2<sup>nd</sup> number:  $5x + 3$

$$x(5x + 3) = 20$$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

The numbers are about 1.7 and 11.6

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.



2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

The numbers are about 1.7 and 11.6 or about -2.3 and -8.6.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

The numbers are about 1.7 and 11.6 or about -2.3 and -8.6.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

The numbers are about 1.7 and 11.6 or about -2.3 and -8.6.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

The numbers are about 1.7 and 11.6 or about -2.3 and -8.6.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

2. One number is 3 more than 5 times another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - 400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

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## Algebra II Class Worksheet #6 Unit 6 RESAC

2. One number is 3 more than 5 times another another. Their product is 20. What are the numbers?

1<sup>st</sup> number:  $x$

$$x(5x + 3) = 20$$

2<sup>nd</sup> number:  $5x + 3$

$$5x^2 + 3x - 20 = 0$$

$$x = \frac{-3 \pm \sqrt{9 - -400}}{10}$$

$$x = \frac{-3 \pm \sqrt{409}}{10}$$

$$x \approx 1.7 \quad \text{or} \quad x \approx -2.3$$

$$5x + 3 \approx 11.6 \quad 5x + 3 \approx -8.6$$

The numbers are about 1.7 and 11.6 or about -2.3 and -8.6.

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Write an **E**quation.

**S**olve the equation.

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## Algebra II Class Worksheet #6 Unit 6 RESAC

3. The area of a rectangle is 8 square inches. Find its dimensions if its length is 2 inches more than 3 times its width.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

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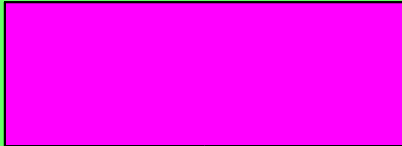
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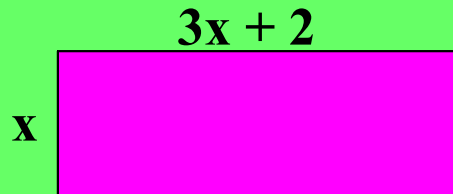
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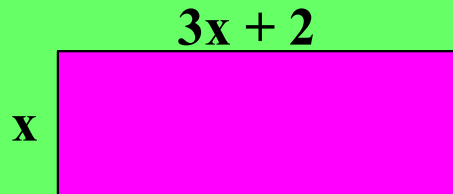
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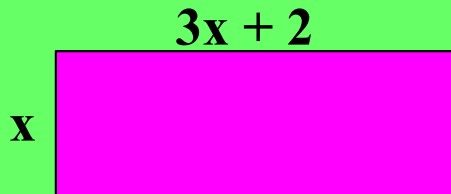
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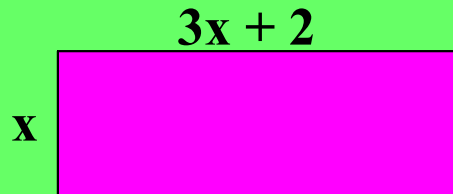
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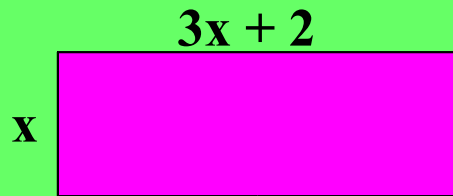
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$x($

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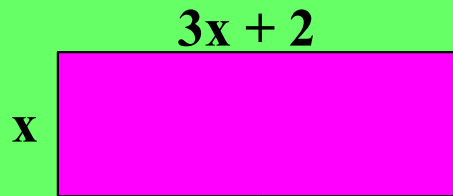
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## Algebra II Class Worksheet #6 Unit 6 RESAC

3. The area of a rectangle is 8 square inches. Find its dimensions if its length is 2 inches more than 3 times its width.



$$x(3x + 2)$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

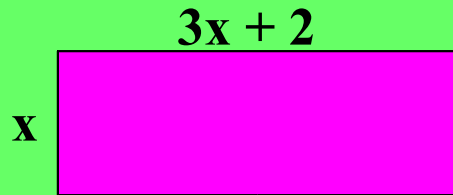
**S**olve the equation.

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**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

3. The area of a rectangle is 8 square inches. Find its dimensions if its length is 2 inches more than 3 times its width.



$$x(3x + 2) = 8$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

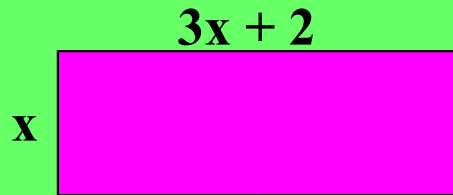
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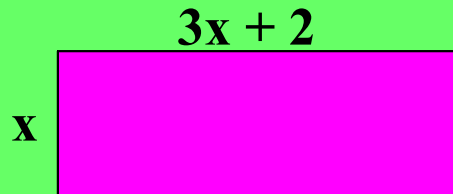


$$x(3x + 2) = 8$$

- R**epresent all unknowns in terms of the same variable. Write an **E**quation.
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$$x(3x + 2) = 8$$

**R**epresent all unknowns in terms of the same variable.  
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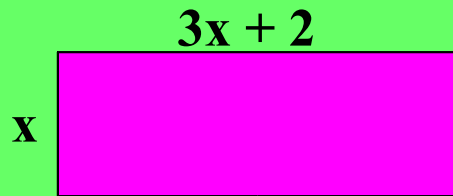
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## Algebra II Class Worksheet #6 Unit 6 RESAC

3. The area of a rectangle is 8 square inches. Find its dimensions if its length is 2 inches more than 3 times its width.



$$x(3x + 2) = 8$$
$$3x^2$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

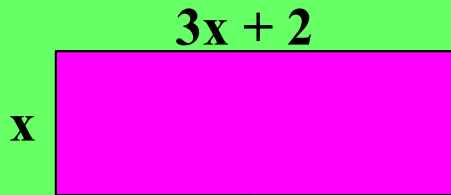
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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$$x(3x + 2) = 8$$

$$3x^2 + 2x$$

**R**epresent all unknowns in terms of the same variable.  
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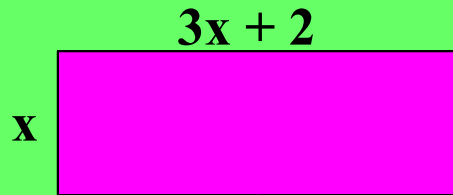
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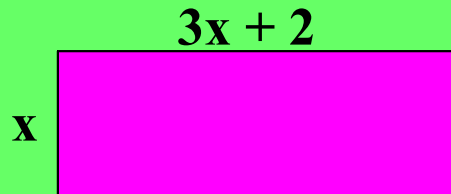
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$$x(3x + 2) = 8$$

$$3x^2 + 2x - 8 = 0$$

**R**epresent all unknowns in terms of the same variable.  
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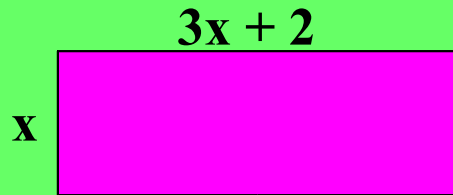
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$$x(3x + 2) = 8$$

$$3x^2 + 2x - 8 = 0$$

$$(3x - 4)(x + 2) = 0$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

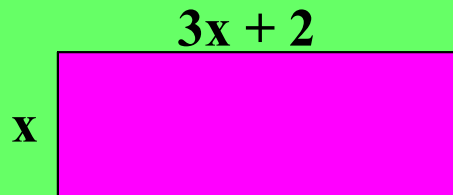
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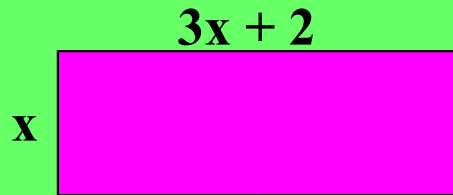
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$$(3x - 4)(x + 2) = 0$$

$$3x - 4 = 0$$

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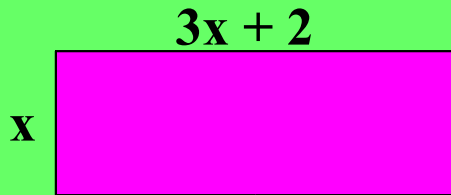
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$$(3x - 4)(x + 2) = 0$$

$$3x - 4 = 0 \text{ or}$$

**R**epresent all unknowns in terms of the same variable.  
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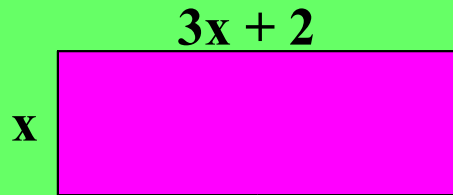
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$$3x - 4 = 0 \text{ or } x + 2 = 0$$

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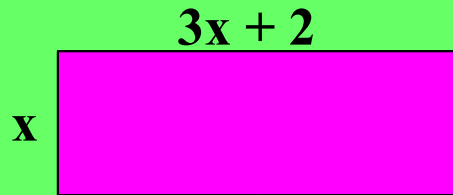
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$$(3x - 4)(x + 2) = 0$$

$$3x - 4 = 0 \text{ or } x + 2 = 0$$

$$3x =$$

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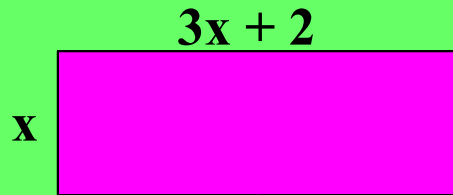
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$$3x = 4$$

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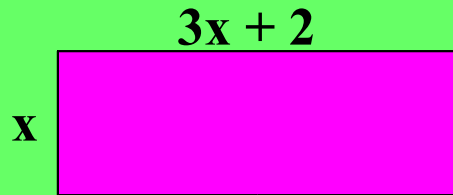
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$$3x - 4 = 0 \text{ or } x + 2 = 0$$

$$3x = 4$$

$$x = 4/3$$

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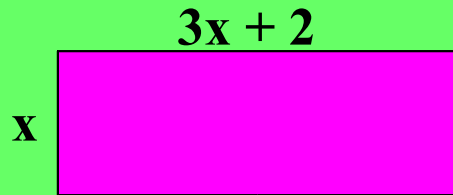
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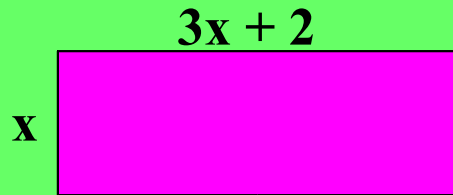
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$$x = 4/3 \quad \text{or} \quad x = -2$$

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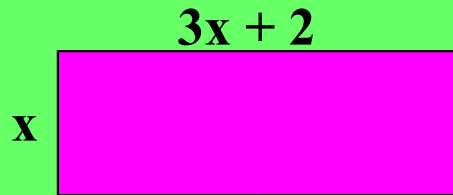
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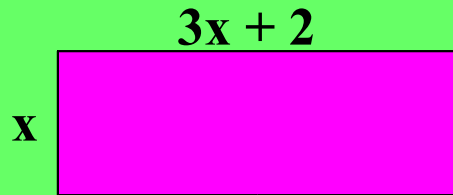
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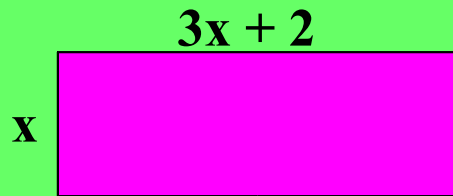
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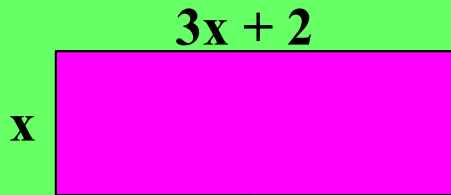
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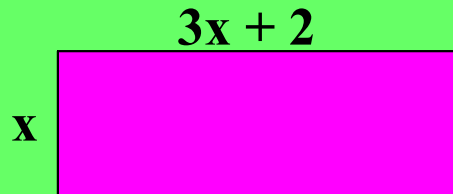
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$$3x^2 + 2x - 8 = 0$$

$$(3x - 4)(x + 2) = 0$$

$$3x - 4 = 0 \text{ or } x + 2 = 0$$

$$3x = 4$$

$$x = 4/3 \text{ or } x = -3$$

$$3x + 2 =$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

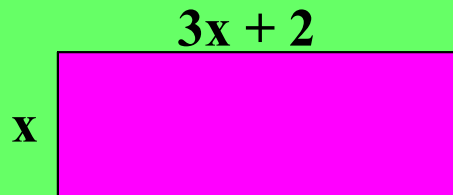
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$$x(3x + 2) = 8$$

$$3x^2 + 2x - 8 = 0$$

$$(3x - 4)(x + 2) = 0$$

$$3x - 4 = 0 \text{ or } x + 2 = 0$$

$$3x = 4$$

$$x = 4/3 \text{ or } x = -3$$

$$3x + 2 = 6$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

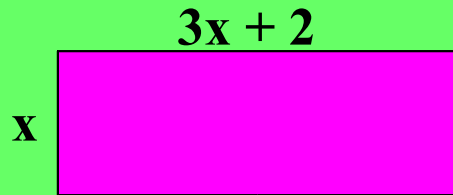
**A**nsWER the question (complete sentence).

**C**heck your solution.



## Algebra II Class Worksheet #6 Unit 6 RESAC

3. The area of a rectangle is 8 square inches. Find its dimensions if its length is 2 inches more than 3 times its width.



$$x(3x + 2) = 8$$

$$3x^2 + 2x - 8 = 0$$

$$(3x - 4)(x + 2) = 0$$

$$3x - 4 = 0 \text{ or } x + 2 = 0$$

$$3x = 4$$

$$x = 4/3 \text{ or } x = -3$$

$$3x + 2 = 6$$

The rectangle is 6 inches long

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

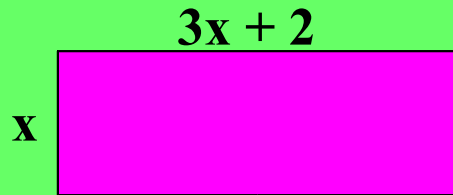
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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$$3x + 2 = 6$$

The rectangle is 6 inches long and 4/3 inches wide.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

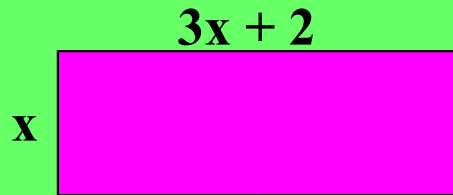
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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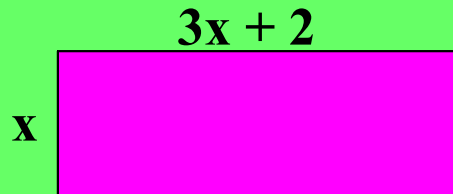
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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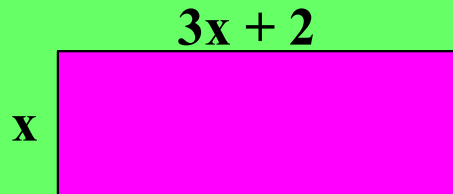
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**The rectangle is 6 inches long and 4/3 inches wide.**

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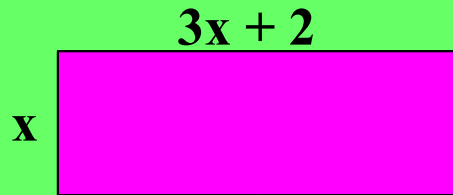
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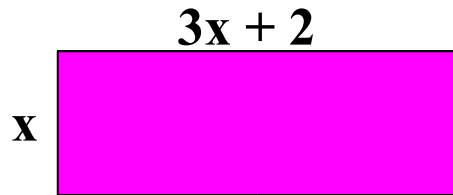
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**The rectangle is 6 inches long and 4/3 inches wide.**

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

**4. The sum of a number and its square is 30. What is the number?**

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.



4. The sum of a number and its square is 30. What is the number?

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

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**A**nsWER the question (complete sentence).

**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

**R**epresent all unknowns in terms of the same variable.

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**R**epresent all unknowns in terms of the same variable.

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## Algebra II Class Worksheet #6 Unit 6 RESAC

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**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.



4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

**R**epresent all unknowns in terms of the same variable.

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**S**olve the equation.

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$$x^2$$

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**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

$$x^2 + x$$

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

$$x^2 + x - 30$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

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**S**olve the equation.

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**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

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$$x - 5 = 0$$

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$$x + x^2 = 30$$

$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

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

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

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**A**nsWER the question (complete sentence).

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$$x^2 + x - 30 = 0$$

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**A**nsWER the question (complete sentence).

**C**heck your solution.

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the number:  $x$

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$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

$$x - 5 = 0 \text{ or } x + 6 = 0$$

$$x = 5$$

**R**epresent all unknowns in terms of the same variable.  
Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

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$$x = 5 \text{ or}$$

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**S**olve the equation.

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$$(x - 5)(x + 6) = 0$$

$$x - 5 = 0 \text{ or } x + 6 = 0$$

$$x = 5 \text{ or } x = -6$$

**R**epresent all unknowns in terms of the same variable.  
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**R**epresent all unknowns in terms of the same variable.

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**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

$$x - 5 = 0 \text{ or } x + 6 = 0$$

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**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

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**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

$$x - 5 = 0 \text{ or } x + 6 = 0$$

$$x = 5 \text{ or } x = -6$$

The number is 5

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

$$x - 5 = 0 \text{ or } x + 6 = 0$$

$$x = 5 \text{ or } x = -6$$

The number is 5 or -6.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nswer the question (complete sentence).

**C**heck your solution.

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

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The number is 5 or -6.

**R**epresent all unknowns in terms of the same variable.

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The number is 5 or -6.

**R**epresent all unknowns in terms of the same variable.

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**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.



## Algebra II Class Worksheet #6 Unit 6 RESAC

4. The sum of a number and its square is 30. What is the number?

the number:  $x$

$$x + x^2 = 30$$

$$x^2 + x - 30 = 0$$

$$(x - 5)(x + 6) = 0$$

$$x - 5 = 0 \text{ or } x + 6 = 0$$

$$x = 5 \text{ or } x = -6$$

The number is 5 or -6.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

5. The length of the longer leg of a right triangle is 2 inches more than twice the length of the shorter leg. The length of the hypotenuse is 2 inches less than 3 times the length of the shorter leg. How long is each side of the triangle?

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

5. The length of the longer leg of a right triangle is 2 inches more than twice the length of the shorter leg. The length of the hypotenuse is 2 inches less than 3 times the length of the shorter leg. How long is each side of the triangle?

**R**epresent all unknowns in terms of the same variable.

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**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

5. The length of the longer leg of a right triangle is 2 inches more than twice the length of the shorter leg. The length of the hypotenuse is 2 inches less than 3 times the length of the shorter leg. How long is each side of the triangle?

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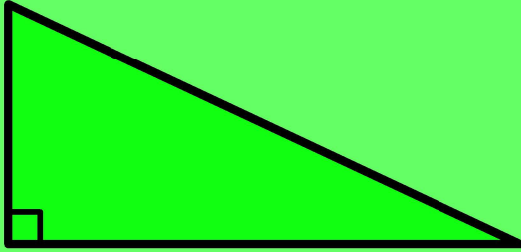
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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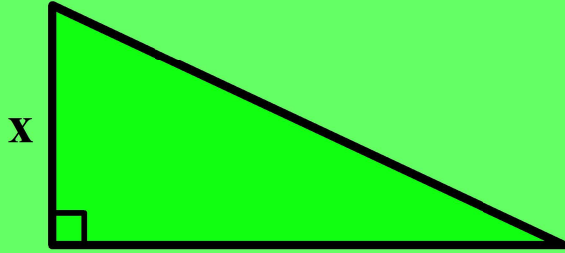
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Write an **E**quation.

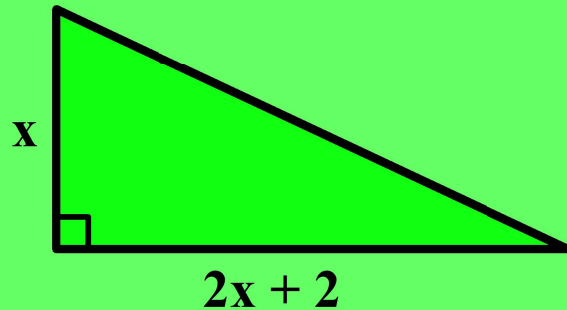
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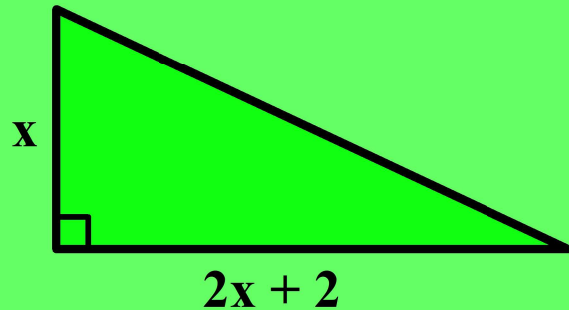
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Write an **E**quation.

**S**olve the equation.

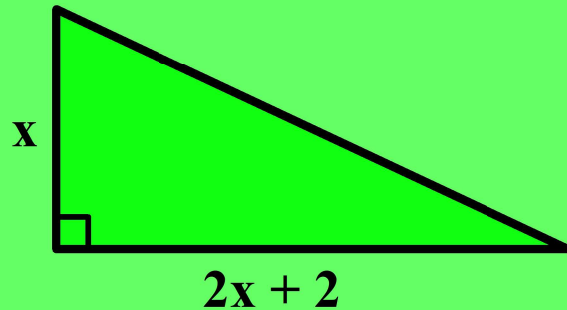
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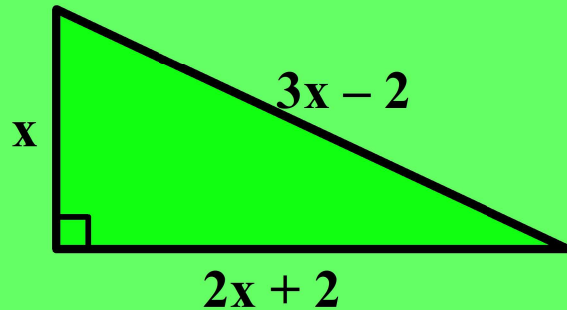
**S**olve the equation.

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**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

5. The length of the longer leg of a right triangle is 2 inches more than twice the length of the shorter leg. The length of the hypotenuse is 2 inches less than 3 times the length of the shorter leg. How long is each side of the triangle?



**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

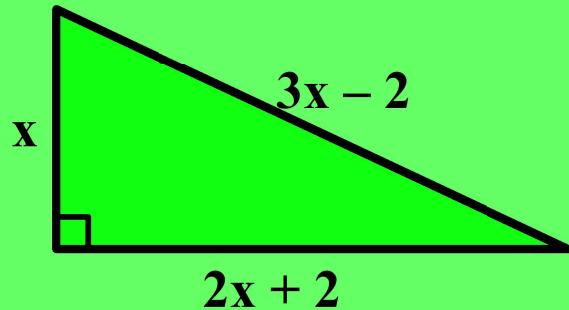
**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

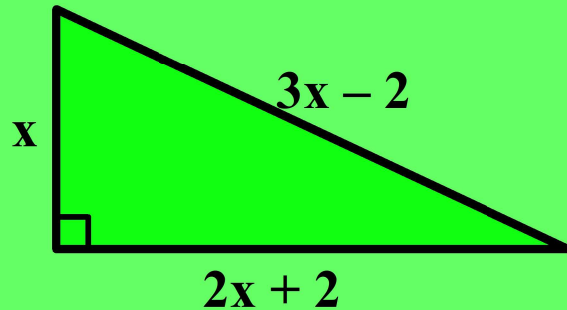
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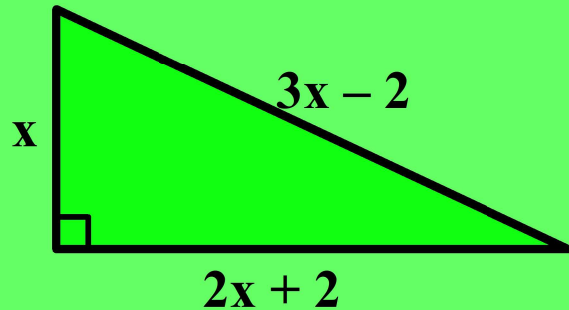
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$$x^2$$

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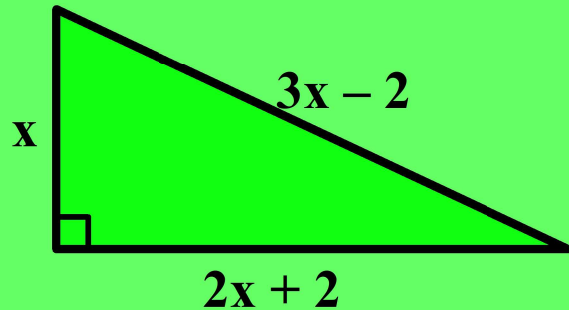
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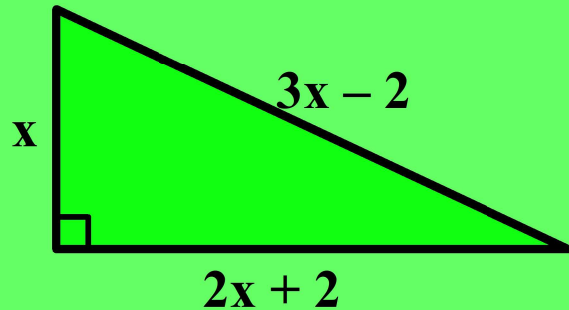
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$$x^2 + (2x + 2)^2$$

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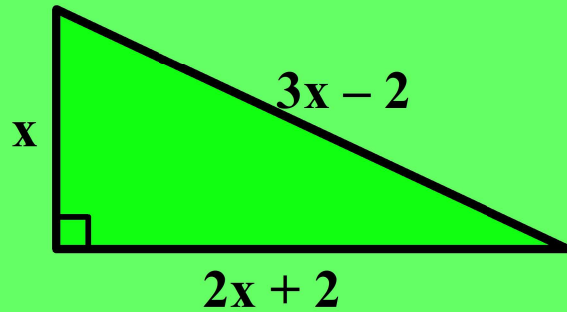
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$$x^2 + (2x + 2)^2 =$$

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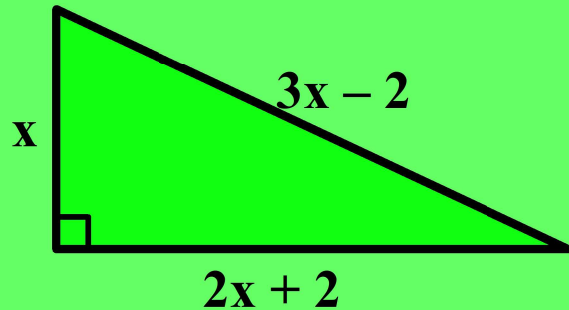
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$$x^2 + (2x + 2)^2 = (3x - 2)^2$$

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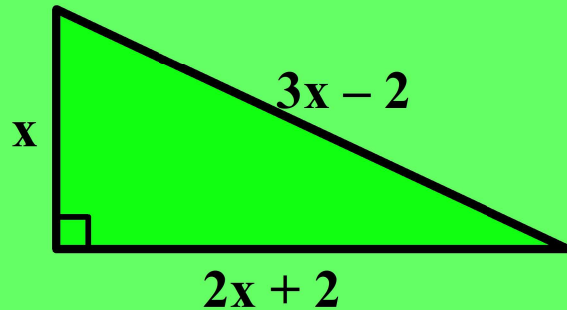
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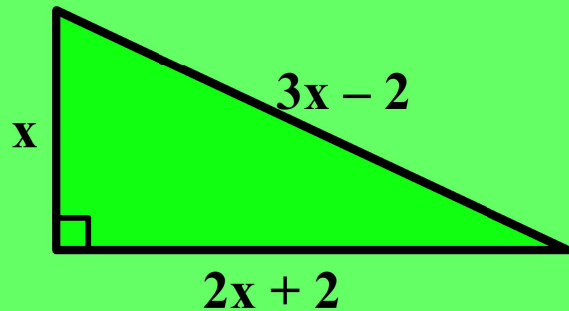


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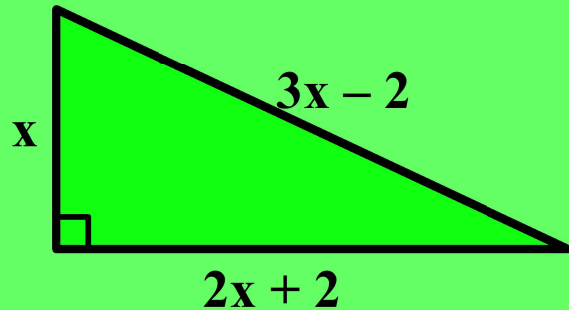
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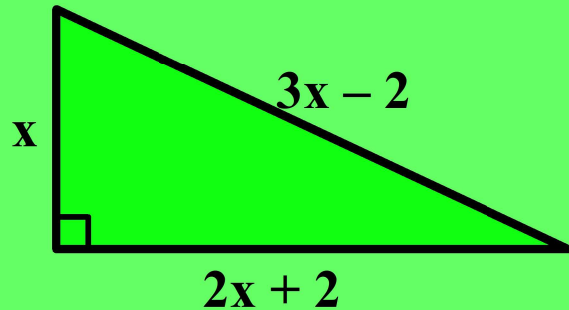
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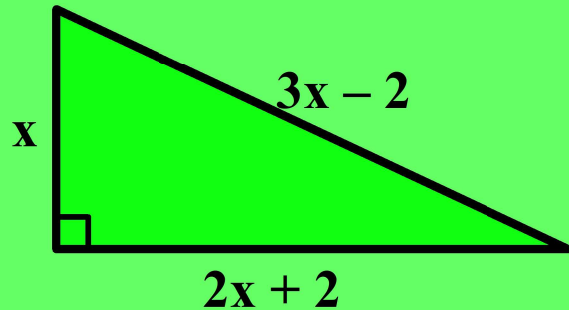
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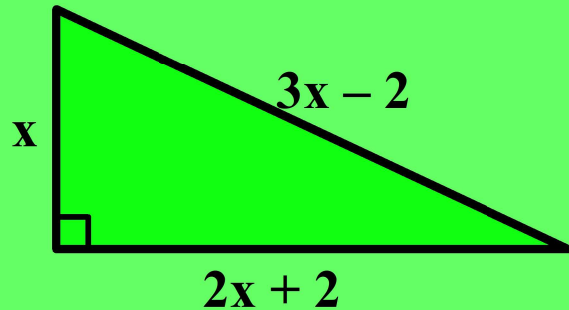
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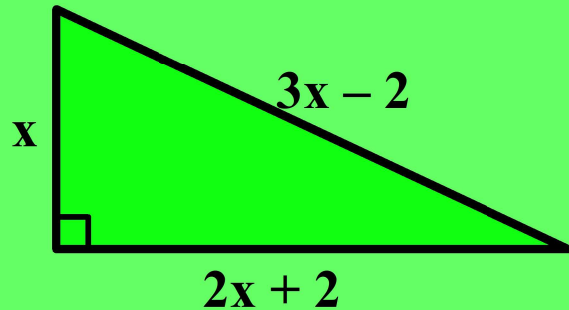
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$$x^2 + (2x + 2)^2 = (3x - 2)^2$$
$$x^2 + 4x^2$$

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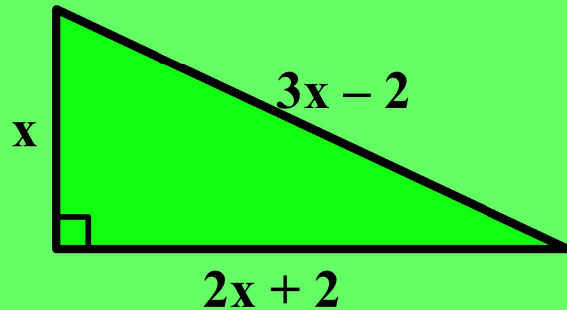
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$$x^2 + (2x + 2)^2 = (3x - 2)^2$$
$$x^2 + 4x^2 + 8x$$

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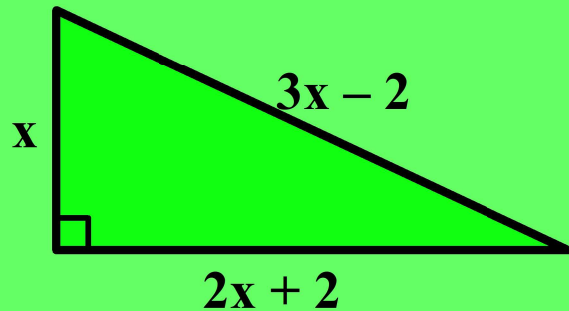
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$$x^2 + (2x + 2)^2 = (3x - 2)^2$$
$$x^2 + 4x^2 + 8x + 4$$

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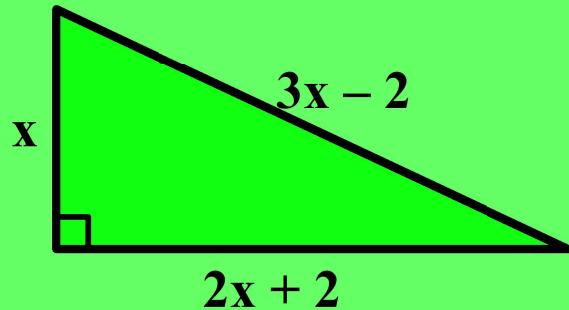
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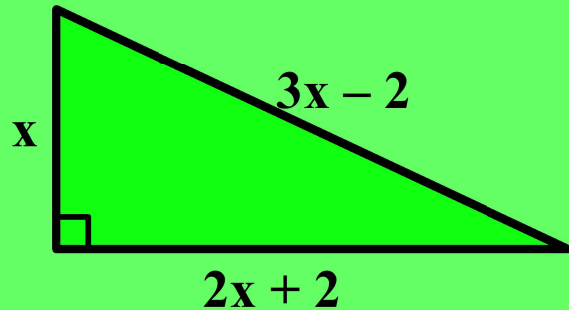
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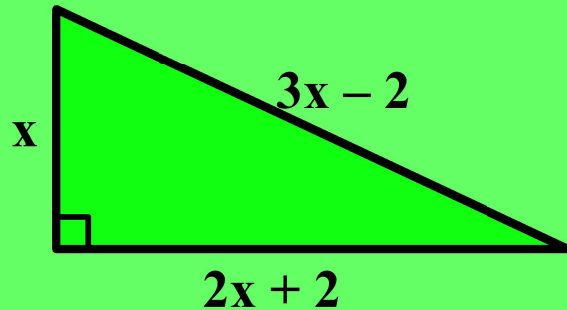
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$$x^2 + (2x + 2)^2 = (3x - 2)^2$$
$$x^2 + 4x^2 + 8x + 4 = 9x^2$$

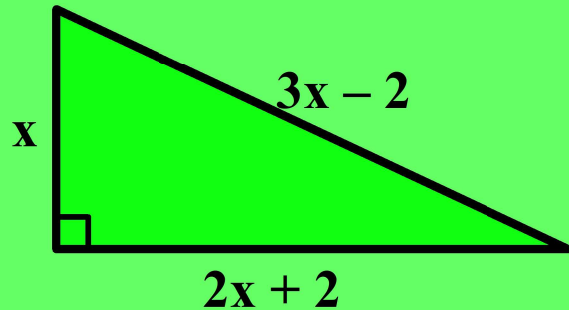
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$$x^2 + (2x + 2)^2 = (3x - 2)^2$$
$$x^2 + 4x^2 + 8x + 4 = 9x^2 - 12x$$

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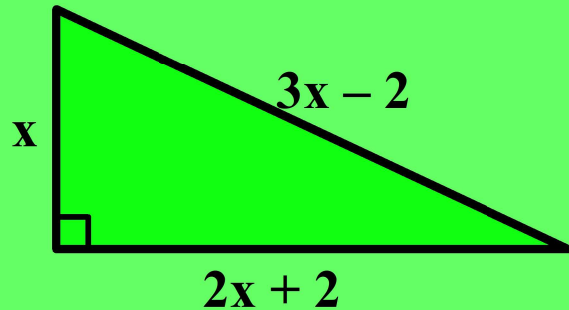
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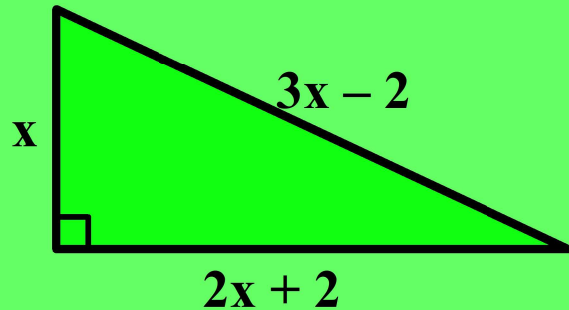
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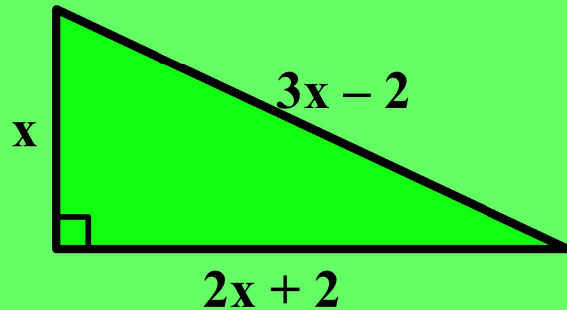
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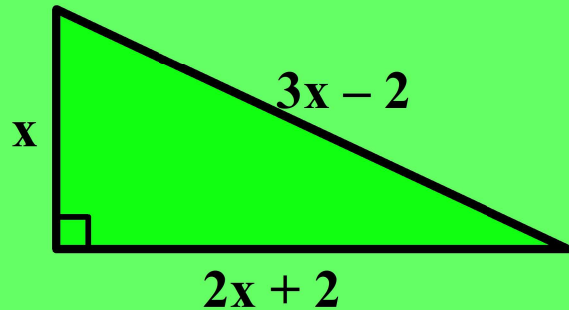
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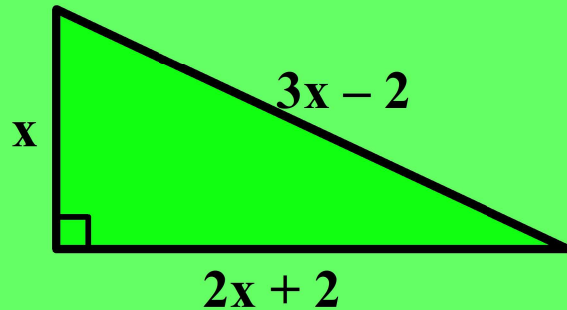
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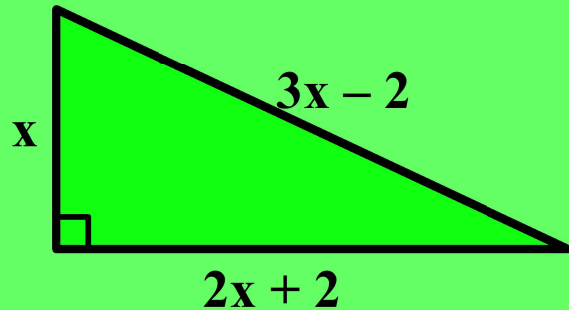
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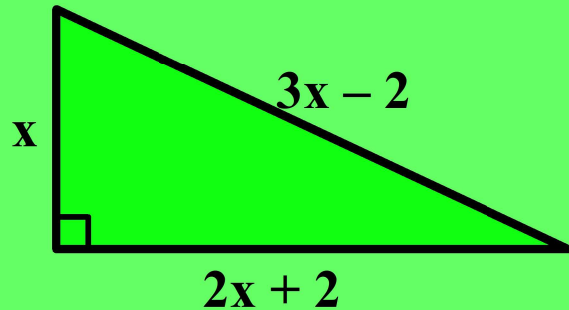
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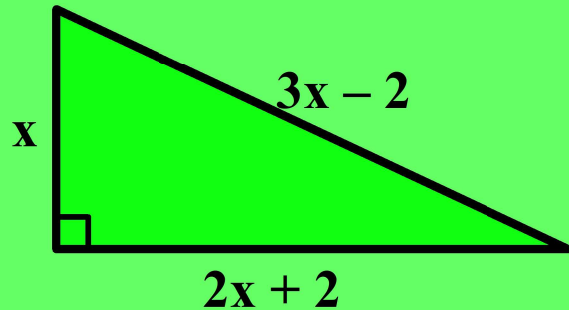
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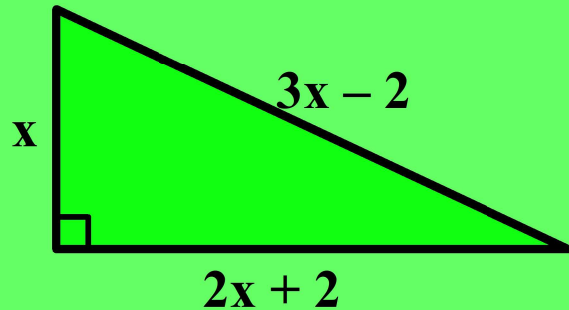
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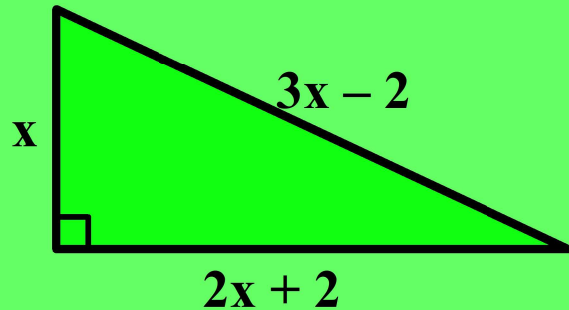
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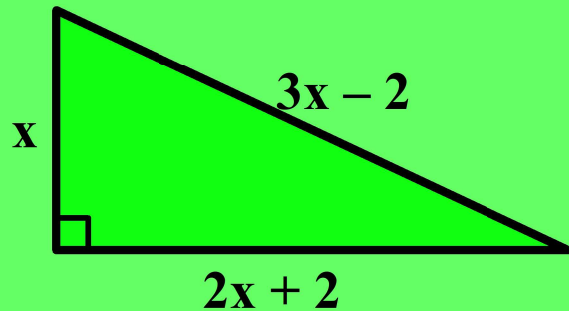
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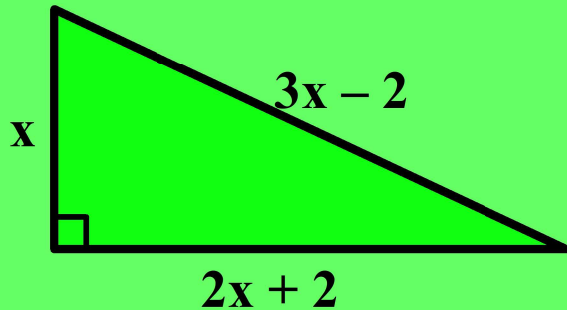
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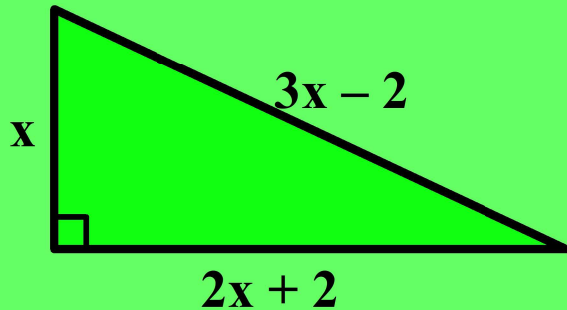
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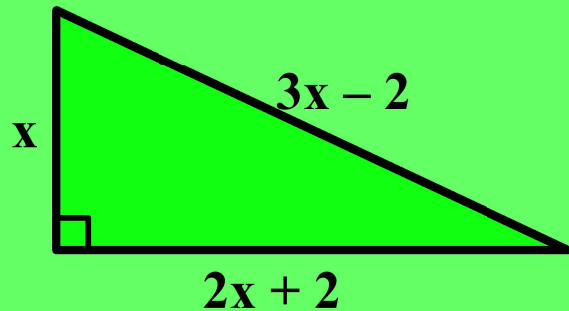
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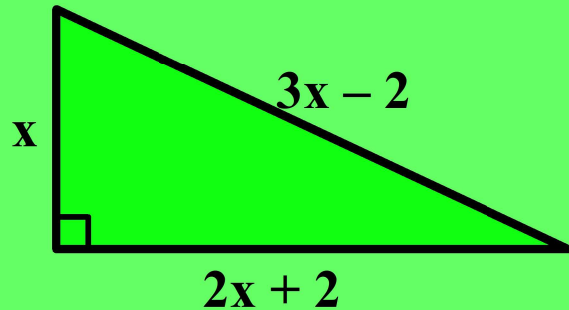
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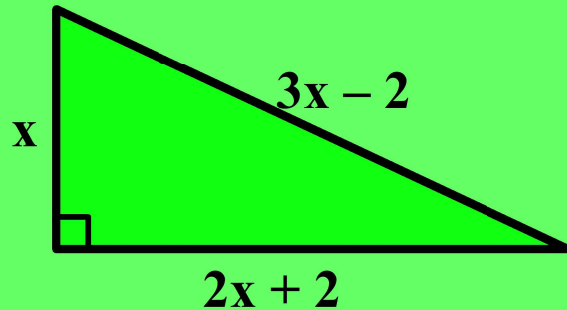
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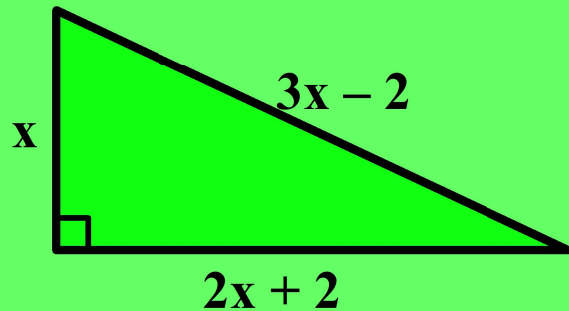
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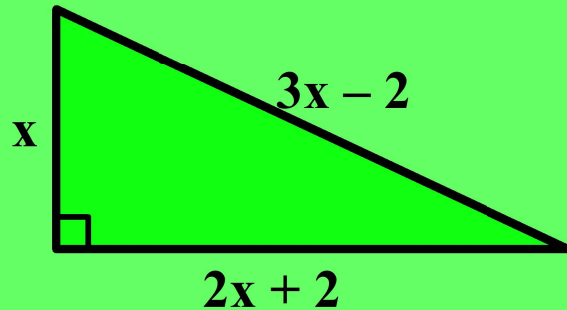
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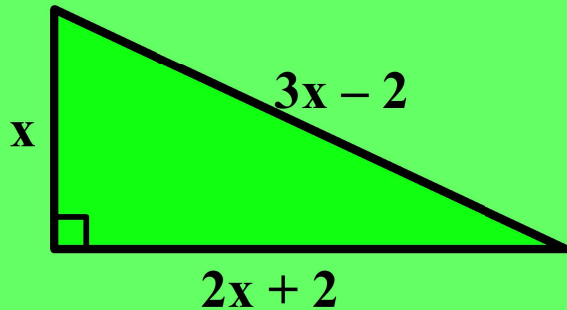
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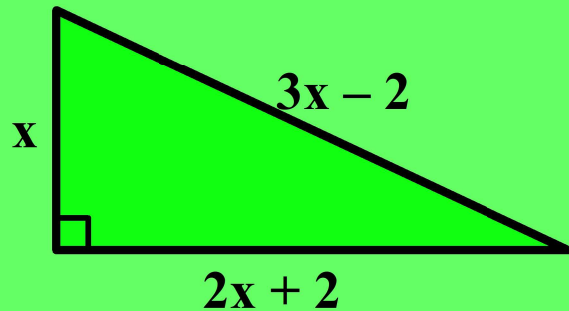
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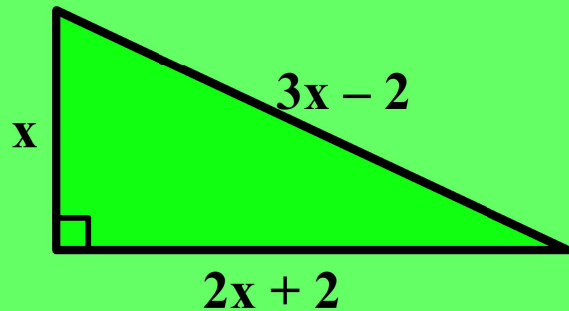


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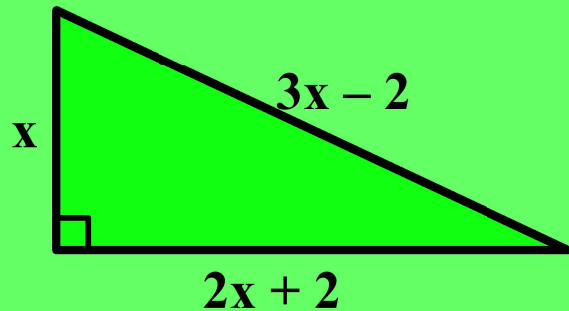


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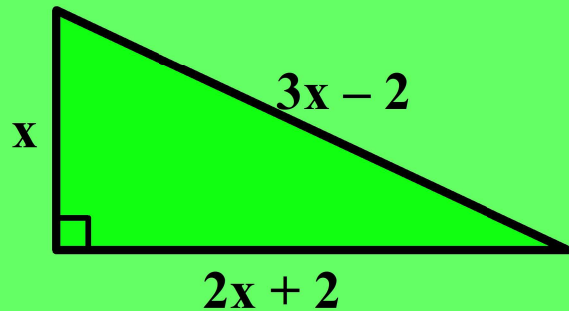
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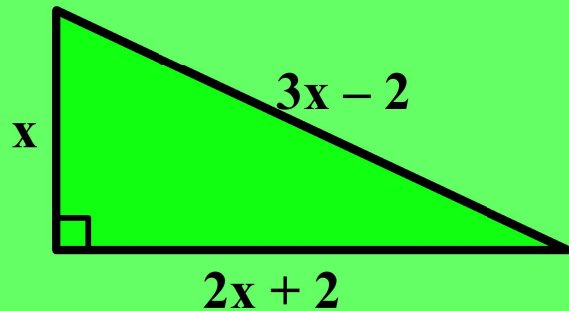
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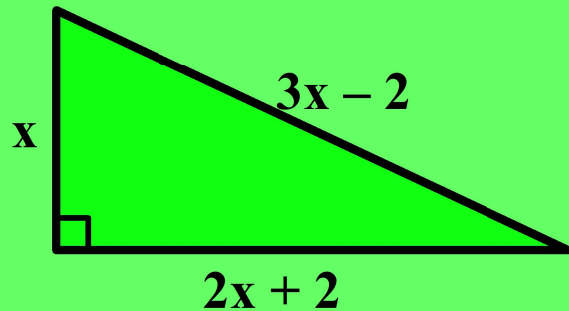
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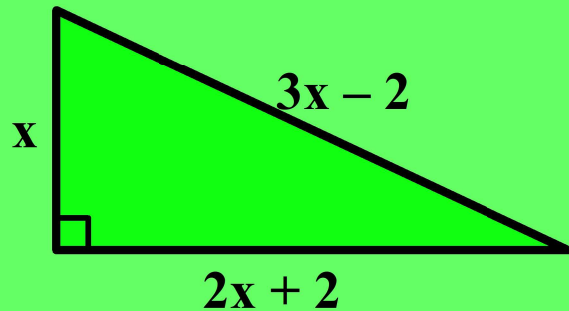
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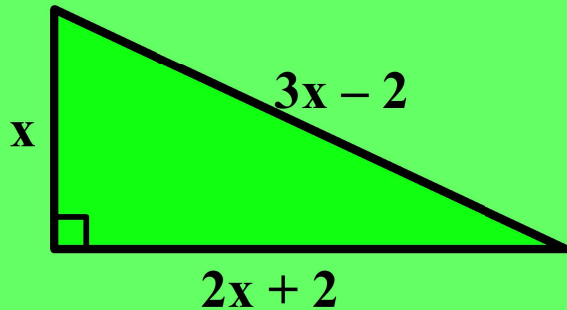
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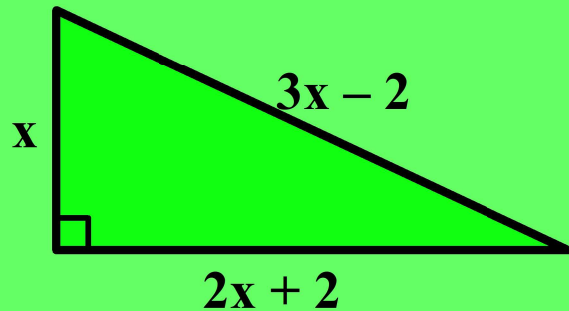
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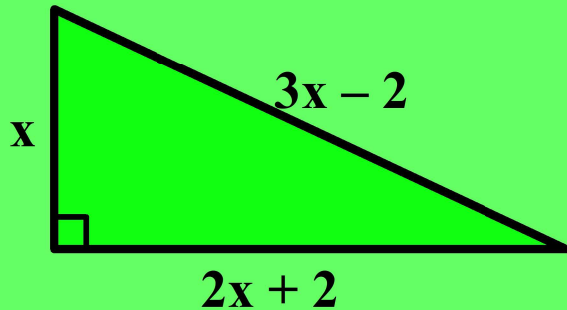
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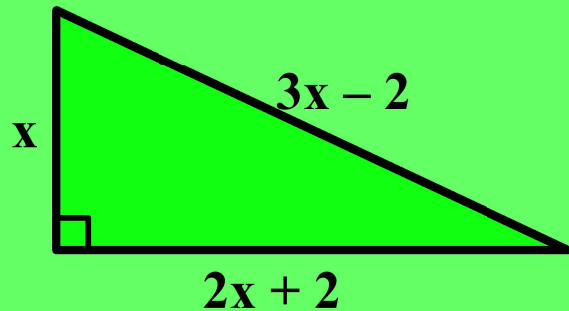
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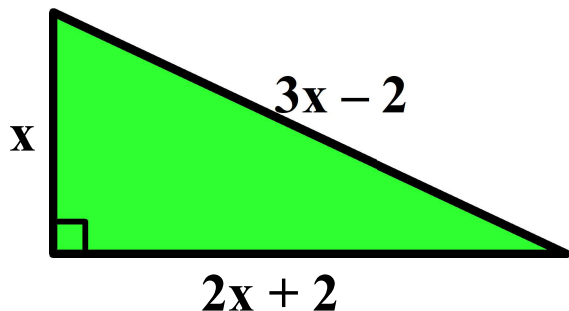
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6. A rectangular garden is 16 feet long and 12 feet wide. It is surrounded by a path of uniform width. Find the width of the path if its area is 204 square feet.

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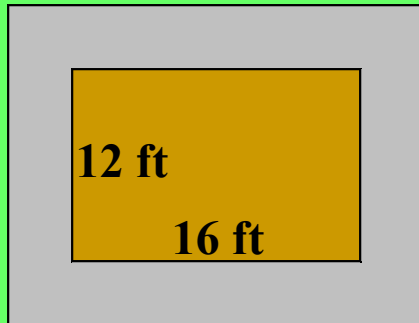
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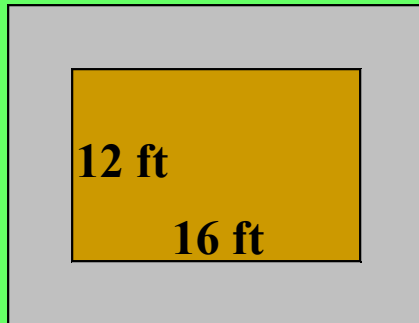
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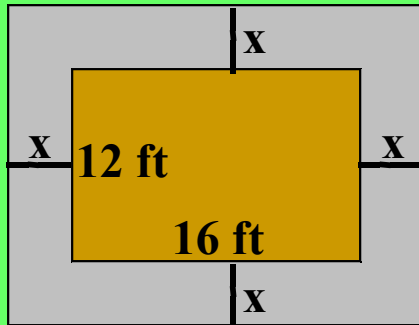
**S**olve the equation.

**A**nsWER the question (complete sentence).

**C**heck your solution.

## Algebra II Class Worksheet #6 Unit 6 RESAC

6. A rectangular garden is 16 feet long and 12 feet wide. It is surrounded by a path of uniform width. Find the width of the path if its area is 204 square feet.



**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

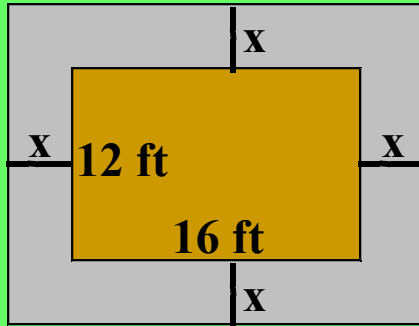
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## Algebra II Class Worksheet #6 Unit 6 RESAC

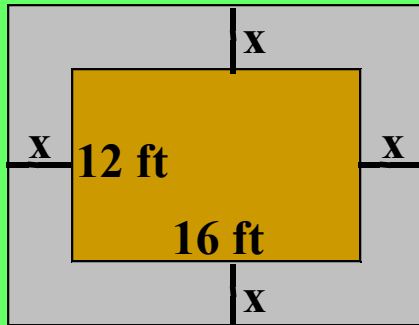
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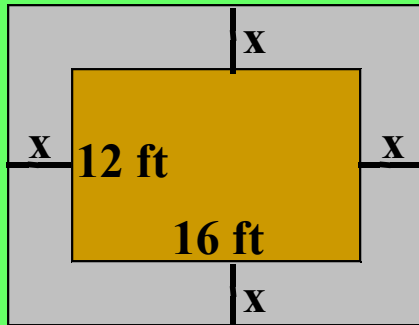
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## Algebra II Class Worksheet #6 Unit 6 RESAC

6. A rectangular garden is 16 feet long and 12 feet wide. It is surrounded by a path of uniform width. Find the width of the path if its area is 204 square feet.



The area of the large rectangle is equal to the area of the garden plus the area of the path.

**R**epresent all unknowns in terms of the same variable.

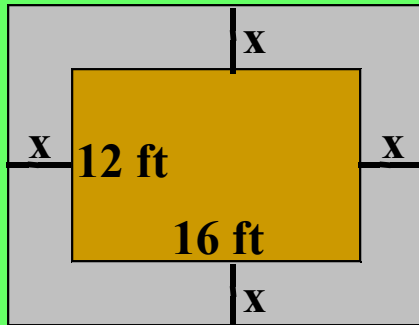
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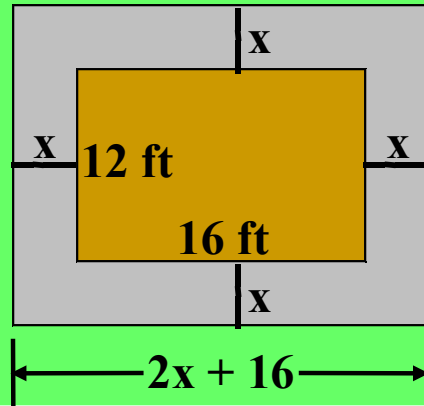
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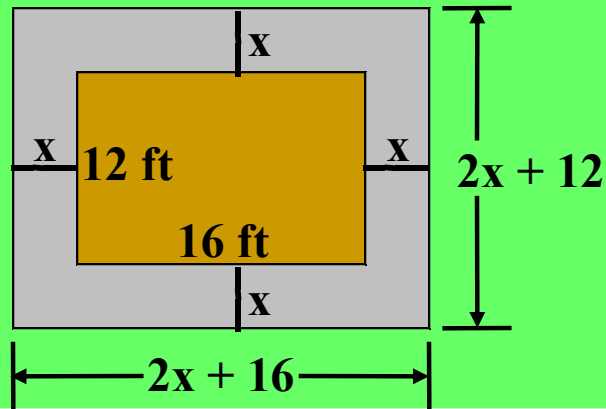
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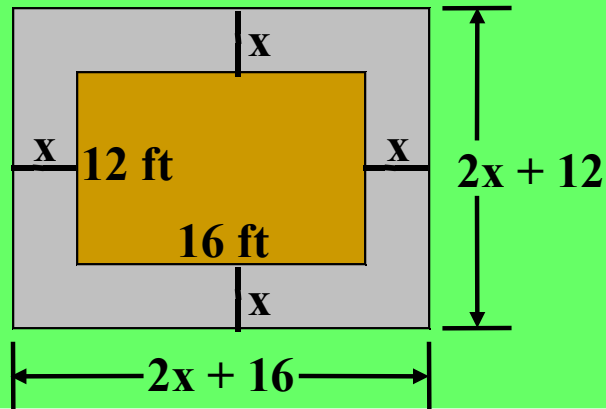
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$$(2x + 16)($$

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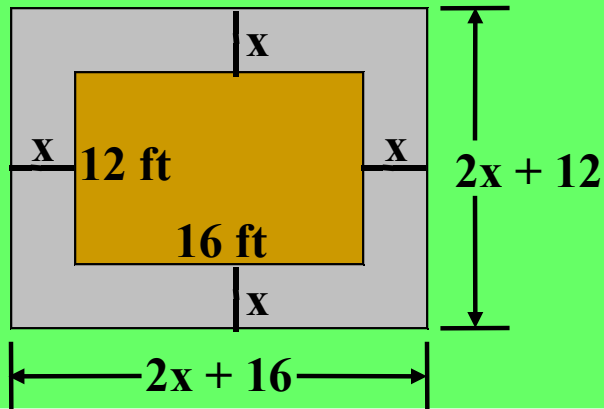
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6. A rectangular garden is 16 feet long and 12 feet wide. It is surrounded by a path of uniform width. Find the width of the path if its area is 204 square feet.



$$(2x + 16)(2x + 12)$$

The area of the large rectangle is equal to the area of the garden plus the area of the path.

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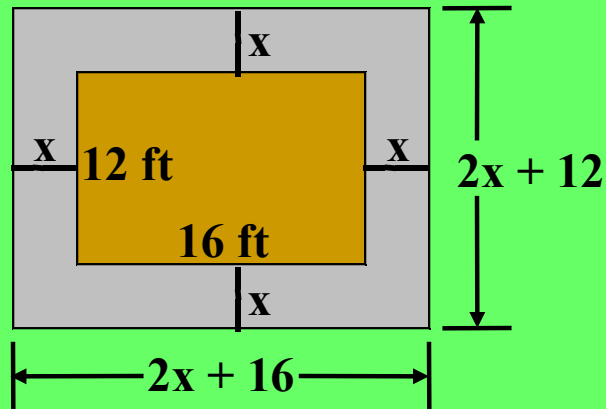
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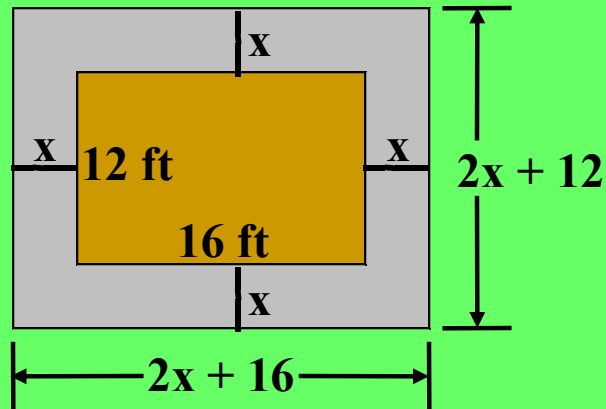
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## Algebra II Class Worksheet #6 Unit 6 RESAC

6. A rectangular garden is 16 feet long and 12 feet wide. It is surrounded by a path of uniform width. Find the width of the path if its area is 204 square feet.



$$(2x + 16)(2x + 12) =$$

The area of the large rectangle is equal to the area of the garden plus the area of the path.

**R**epresent all unknowns in terms of the same variable.

Write an **E**quation.

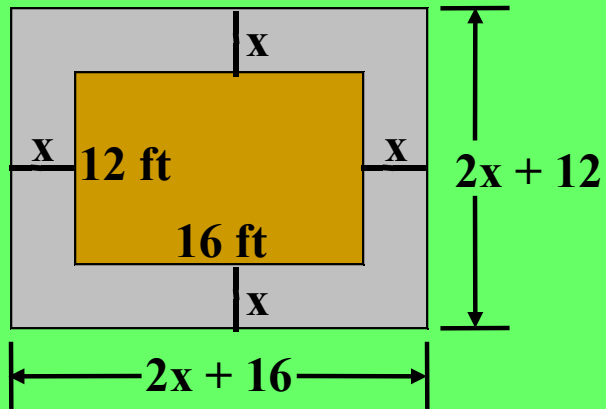
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$$(2x + 16)(2x + 12) =$$

The area of the large rectangle is equal to the area of the garden plus the area of the path.

The area of the garden is  $(16 \text{ ft})(12 \text{ ft}) = 192$  square feet.

**R**epresent all unknowns in terms of the same variable.

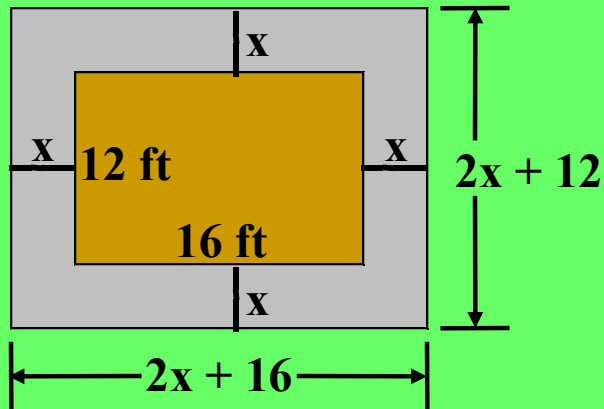
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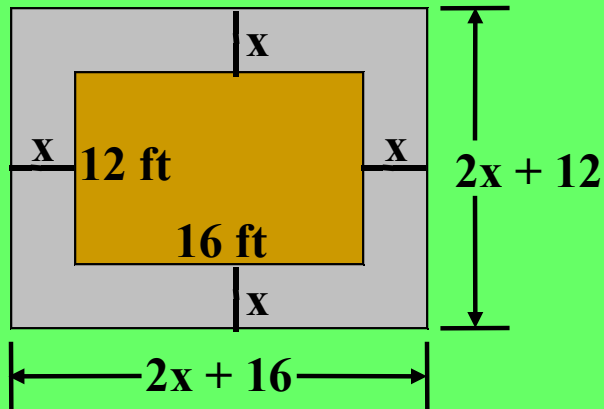
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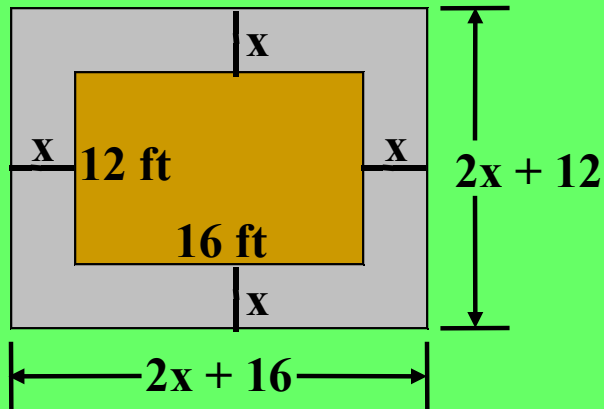
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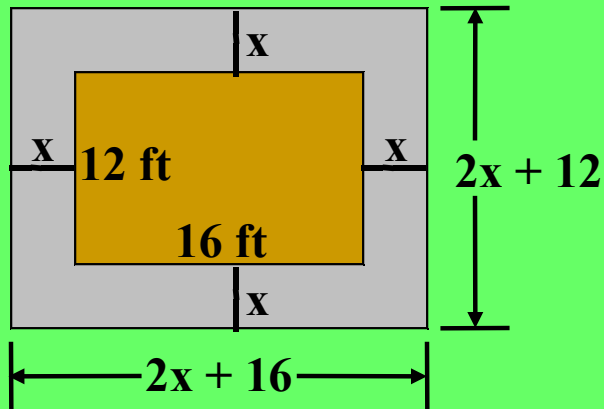
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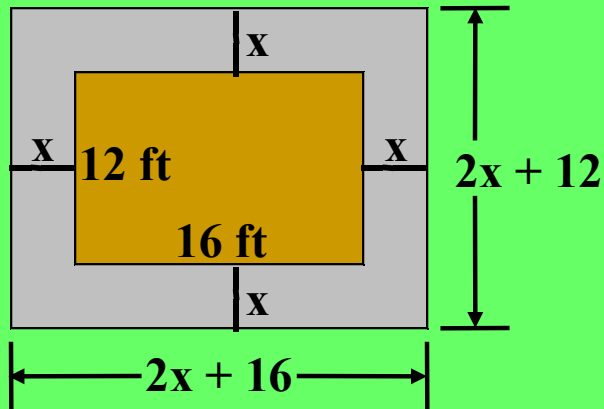
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$$(2x + 16)(2x + 12) = 192 + 204$$

The area of the large rectangle is equal to the area of the garden plus the area of the path.

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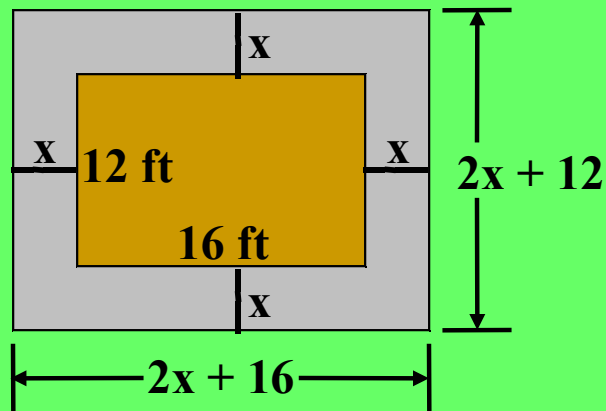
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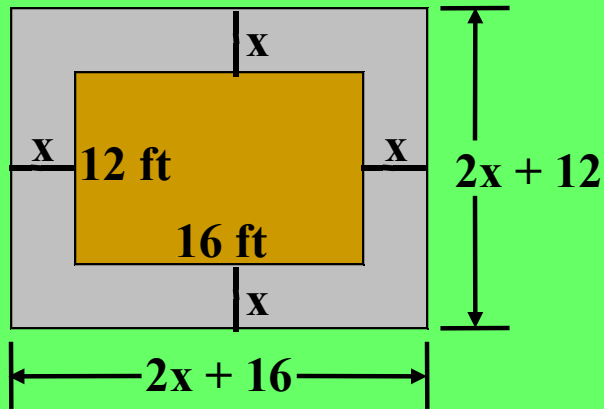
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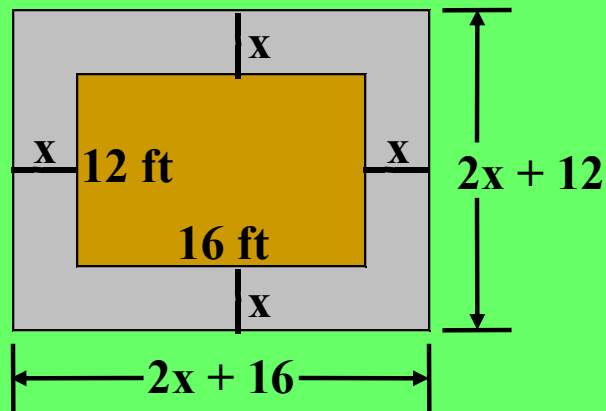
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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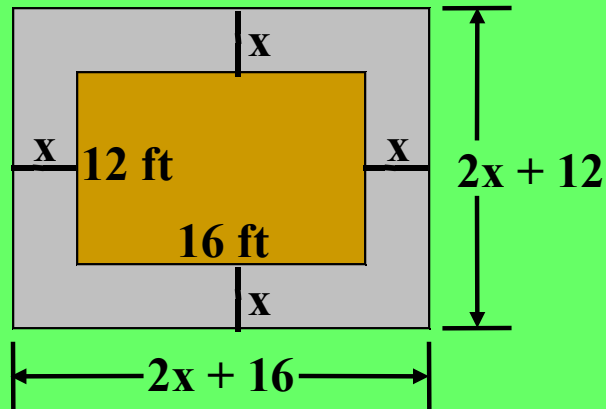
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$$(2x + 16)(2x + 12) = 192 + 204$$

$$4x^2$$

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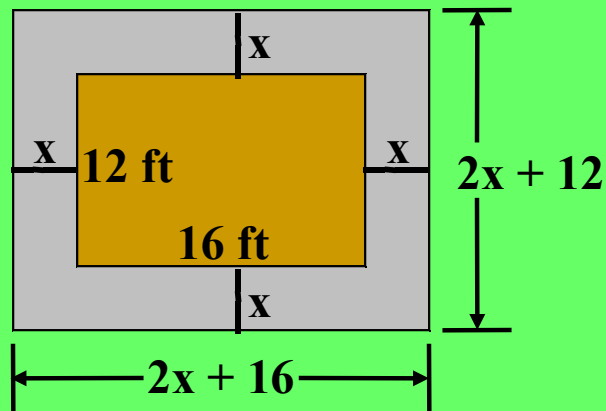
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$$(2x + 16)(2x + 12) = 192 + 204$$

$$4x^2 + 56x$$

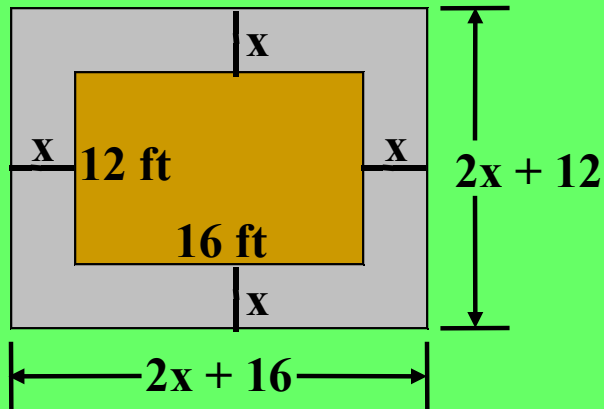
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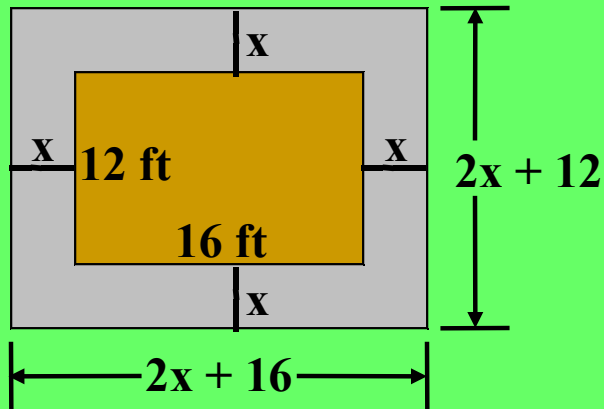
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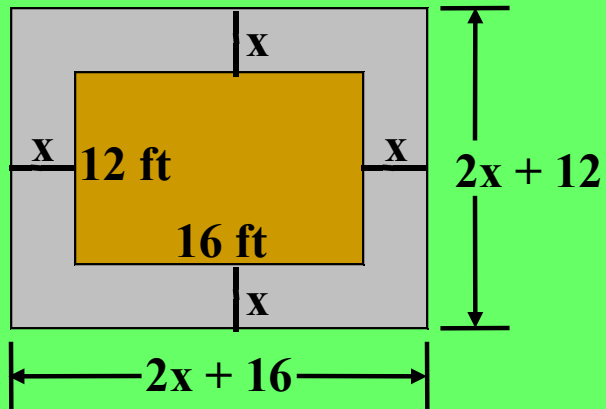
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$$(2x + 16)(2x + 12) = 192 + 204$$

$$4x^2 + 56x + 192 = 396$$

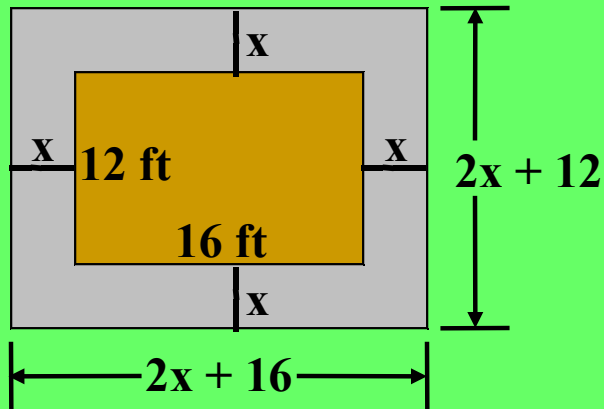
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$$4x^2 + 56x + 192 = 396$$

$$4x^2 + 56x$$

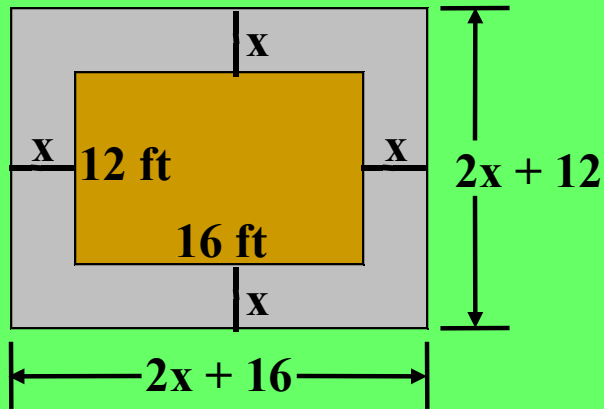
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$$4x^2 + 56x + 192 = 396$$

$$4x^2 + 56x - 204$$

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Write an **E**quation.

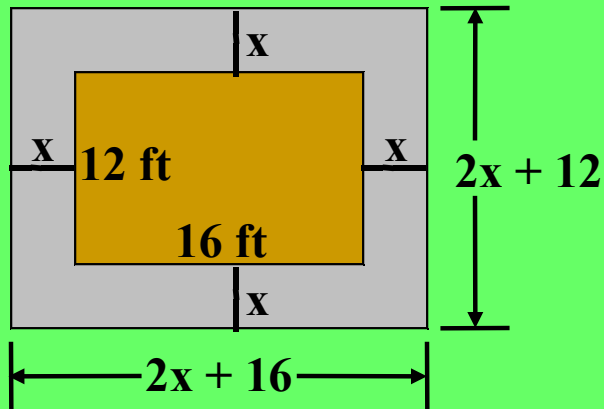
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$$4x^2 + 56x + 192 = 396$$

$$4x^2 + 56x - 204 = 0$$

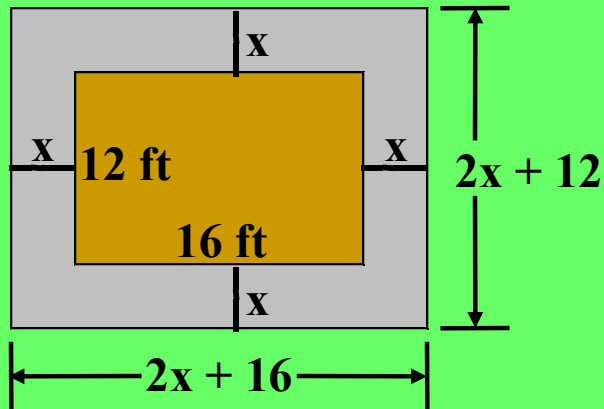
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$$4x^2 + 56x + 192 = 396$$

$$4x^2 + 56x - 204 = 0$$

$$x^2$$

**R**epresent all unknowns in terms of the same variable.  
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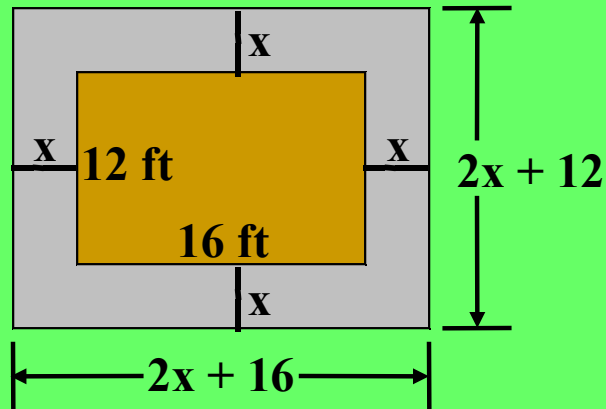
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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$$(2x + 16)(2x + 12) = 192 + 204$$

$$4x^2 + 56x + 192 = 396$$

$$4x^2 + 56x - 204 = 0$$

$$x^2 + 14x$$

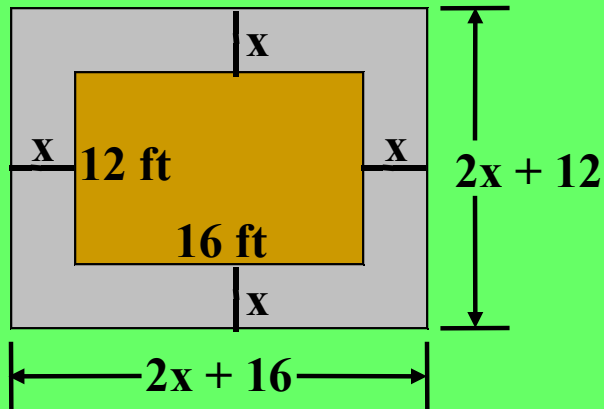
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$$4x^2 + 56x + 192 = 396$$

$$4x^2 + 56x - 204 = 0$$

$$x^2 + 14x - 51$$

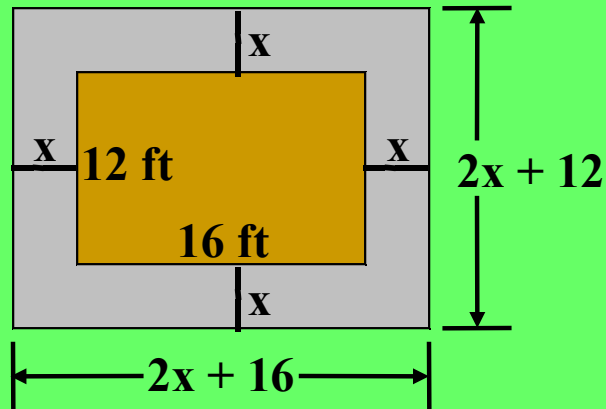
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$$(2x + 16)(2x + 12) = 192 + 204$$

$$4x^2 + 56x + 192 = 396$$

$$4x^2 + 56x - 204 = 0$$

$$x^2 + 14x - 51 = 0$$

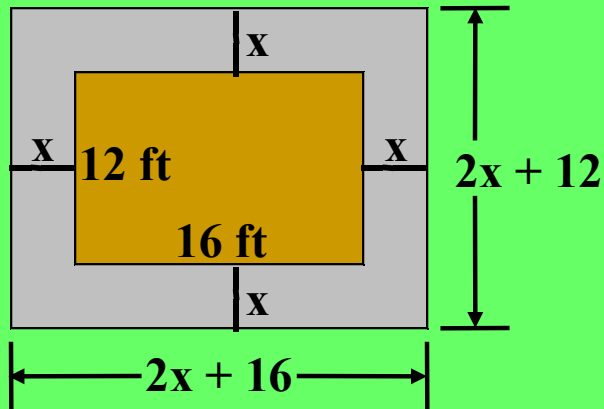
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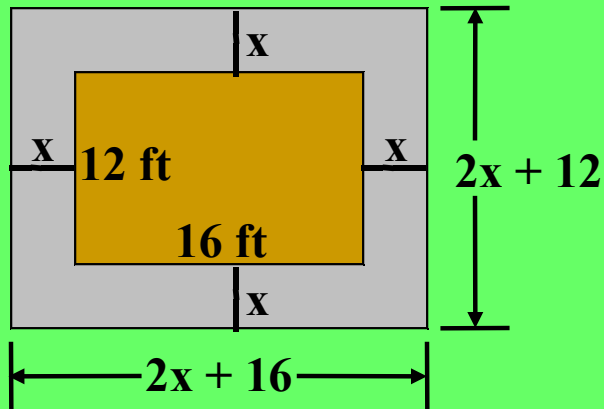
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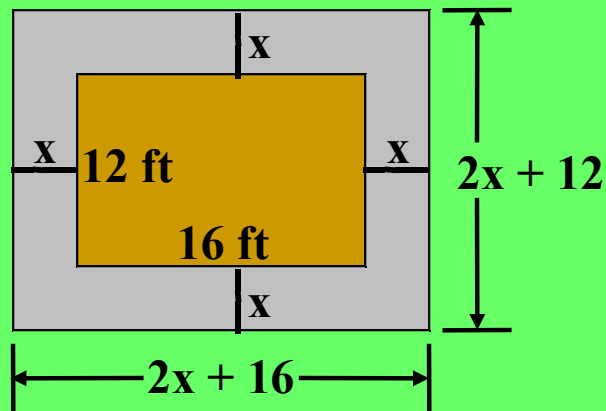
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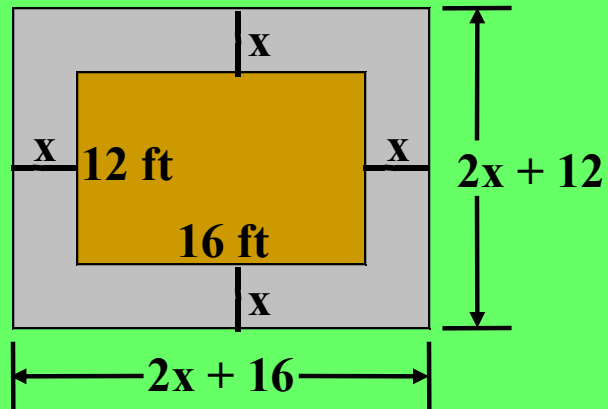
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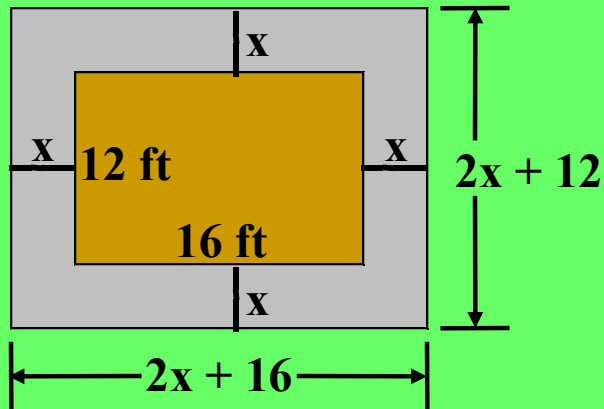
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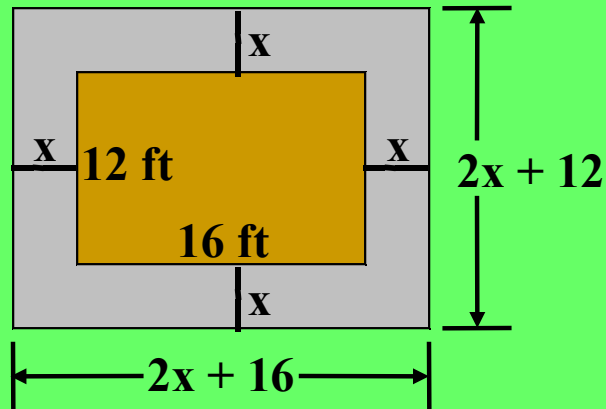
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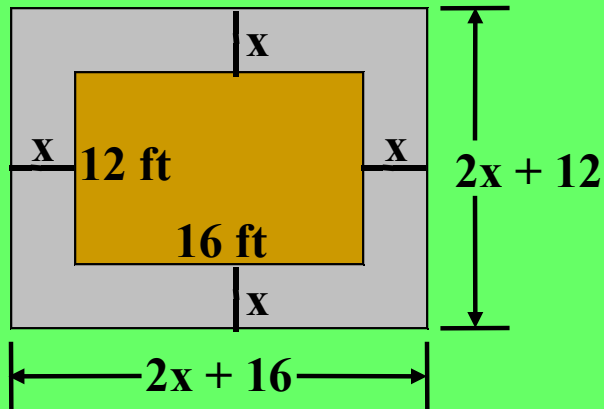
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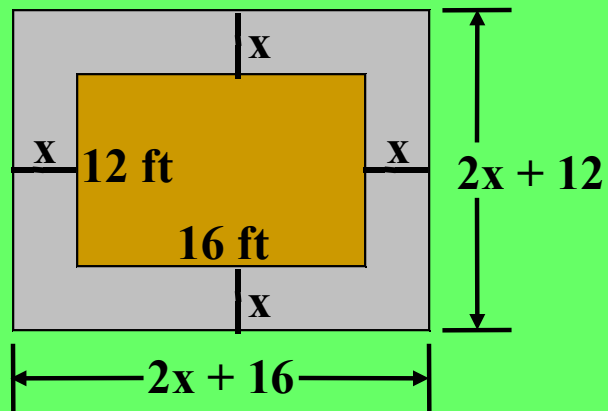
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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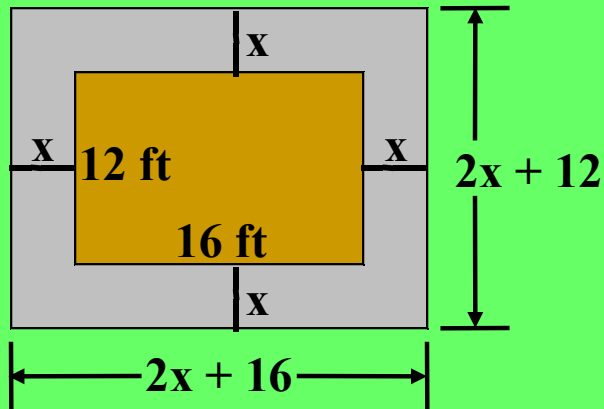
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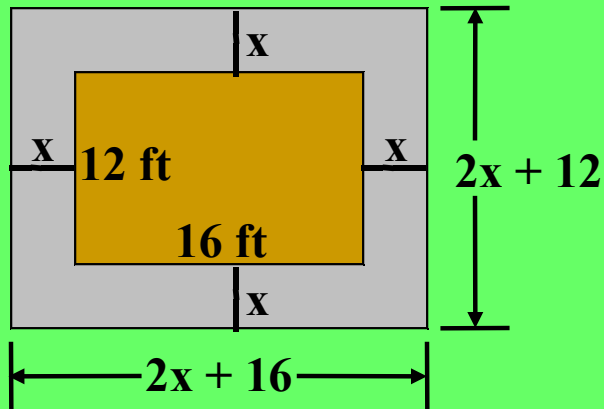
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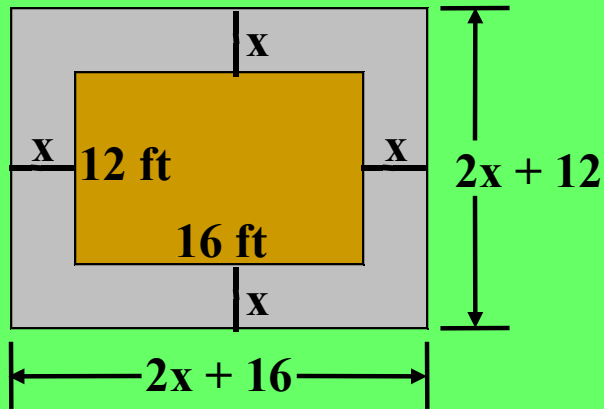
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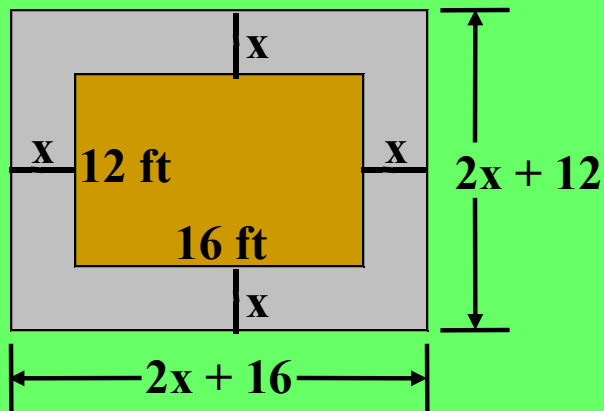
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## Algebra II Class Worksheet #6 Unit 6 RESAC

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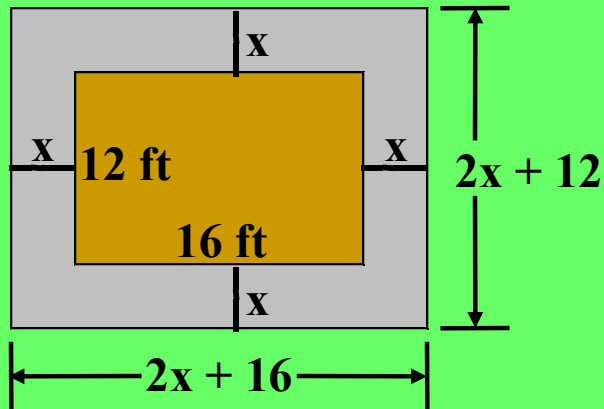
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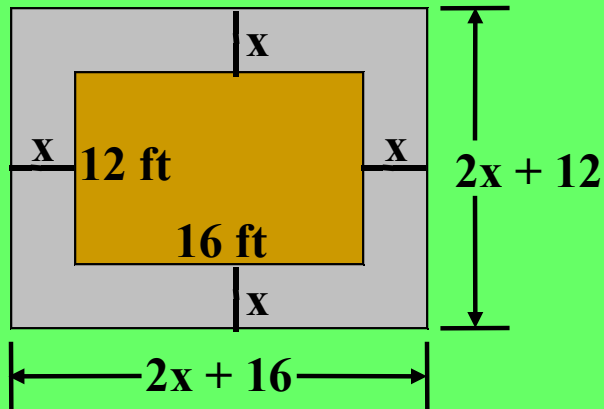
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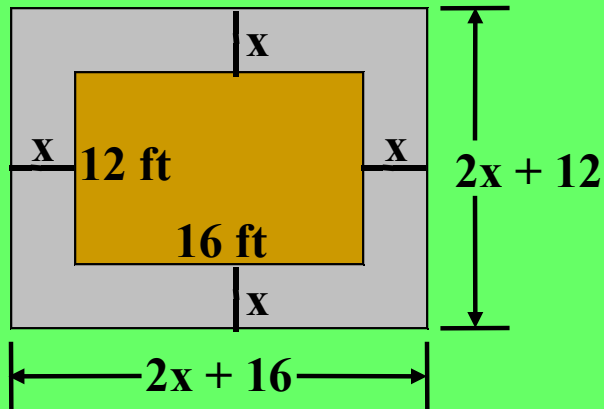
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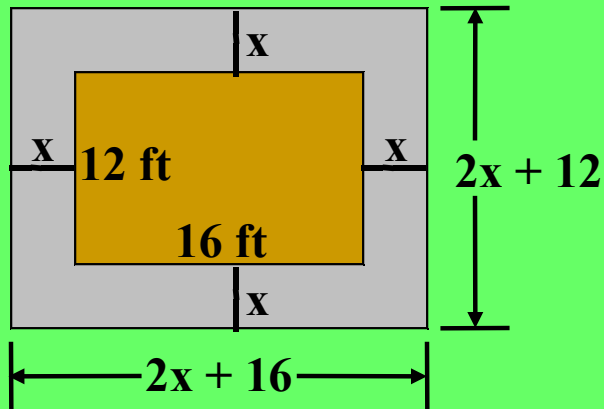
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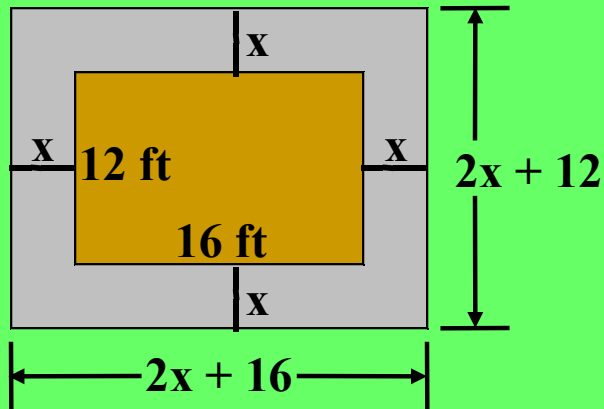
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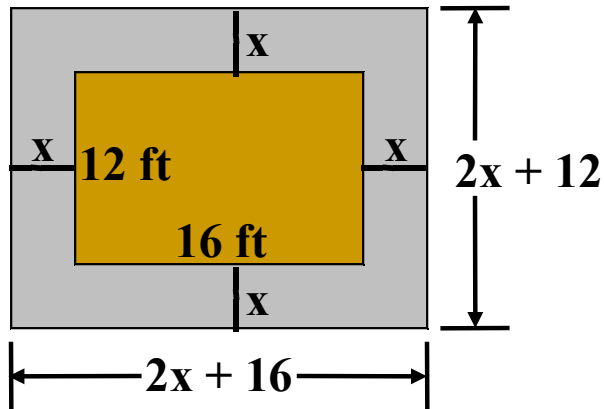
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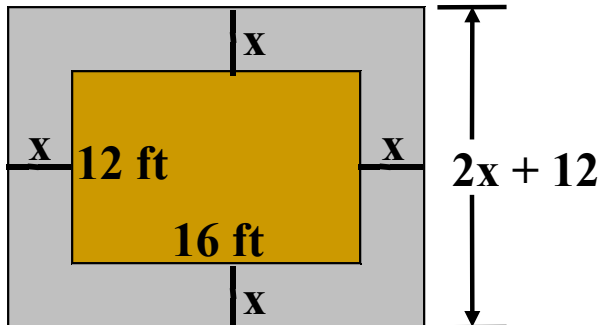
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**Good luck on your homework !!**

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