Topic 6:   Polynomial Equations

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Draw a possible rectangle showing the dimensions that meet these conditions.

Topic 6:   Polynomial Equations

Overview
Answer SAS1 - Question 1

Topic 6:   Polynomial Equations

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answer to SAS1 question 1

Topic 6:   Polynomial Equations

Overview
Answer SAS1 - Questions 2 & 3

Topic 6:   Polynomial Equations

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answers to SAS1 questions 2&3

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Topic 6:   Polynomial Equations

Overview
Answer SAS1 - Question 4

Topic 6:   Polynomial Equations

Overview: Page 3

Answers SAS1 question 4

What are some strategies you've learned to solve Quadratic Equations?

Use a Table, Graphing, Factoring, Quadratic Formula, Square Roots.

Which of these might be useful for solving Cubic Equations?

Using a Table, Graphing, and Factoring

Topic 6:   Polynomial Equations

SAS2: Answer question 1

Topic 6:   Polynomial Equations

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Answer to SAS2 question 1   Check

Topic 6:   Polynomial Equations

Exploring: "Quadratic Equations"

SAS2: Look at question 2

Answer to SAS2 question 2   Check

Students were shown how to use a graphing calculator to solve an equation by graphing.

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SAS2 - question #4

To solve by factoring you must make one side of the equation = 0.

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panels 1-3

$x^2 - 15x + 50 = 0$

a·c

+50

-10 -5 $\longrightarrow$ $(x-10)(x-5) = 0$

$x = 5$ or 10

-15

b

Topic 6:   Polynomial Equations

SAS2 - answer question #6

To solve using the Quadratic Formula you must make one side of the equation = 0.
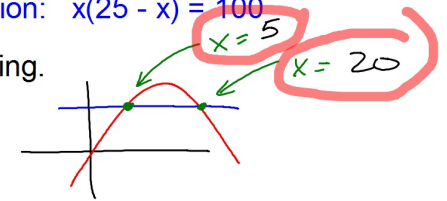
Topic 6:   Polynomial Equations

answer to SAS2 question 6

Consider this quadratic equation: $x(25 - x) = 100$

- Solve this equation by graphing.

$Y_1 = x(25 - x)$

$Y_2 = 100$

$x = 5$
$x = 20$

- Solve using the Quadratic Formula.

$x(25 - x) = 100$
$25x - x^2 = 100$

$0 = x^2 - 25x + 100$

$a = 1$
$b = 25$
$c = 100$

$b^2 - 4ac = 225$

$x = \dfrac{25 \pm \sqrt{225}}{2}$

$= \dfrac{25 \pm 15}{2}$

$= \dfrac{40}{2} \ \text{\&} \ \dfrac{10}{2}$

$X = 20, 5$

- Solve by factoring.

$0 = x^2 - 25x + 100$

$\begin{array}{c} 100 \\ -20 \diagup\diagdown -5 \\ -25 \end{array}$

$0 = (x - 20)(x - 5)$

$X = 20, 5$

Hwk #28

Practice Sheet:

Solving quadratic equations by factoring
or using the quadratic formula.