DO NOW

Solve for a:

$a^2 + 10a = 3a - 10$

$-3a \quad -3a$

$a^2 + 7a = -10$

$+10 \quad +10$

$a^2 + 7a + 10 = 0$

10	7
5·2	5+2

$(a^2 + 5a)(+2a + 10) = 0$

$a(a+5) + 2(a+5) = 0$

$(a+2)(a+5) = 0$

$a+2=0 \quad | \quad a+5=0$

$a = -2 \quad | \quad a = -5$

$a = -2, -5$

Apr 13-7:00 AM

HW Answers

Page 456

8) $x = \pm 10$

9) $x = 0, 10$

10) $x = -5, 3$

11) $x = 0, 14$

12) $x = -7, 1$

Page 457

7) $x = \pm 5$

8) $x = \pm 8$

10) $x = \pm 9$

$\sqrt{(x-5)^2} = \sqrt{25}$

$x - 5 = \pm 5$

$+ \qquad -$

$x - 5 = 5 \quad | \quad x - 5 = -5$

$+5 \quad +5 \quad | \quad +5 \quad +5$

$x = 10 \quad | \quad x = 0$

$x = 10, 0$

Mar 15-9:44 AM

Solving Quadratic Equation Word Problems

1) Read and underline in the question.

2) Draw a diagram if necessary.

3) Set up a let statement. (Labeled diagram)

4) Write a let statement.

5) Set up your quadratic equation.
   5a. Make sure your equation is set = 0

6) Solve your Quadratic equation

7) Go Back and make sure your have answered the question Label your Answer

Mar 28-12:02 PM

2. The product of two positive consecutive even integers is 120. Find the integers.

let x = 1st integer
$x+2$ = 2nd integer

$x(x+2) = 120$
$-120 \quad -120$
$x(x+2) - 120 = 0$

$x^2 + 2x - 120 = 0$
$(x^2 - 10x + 12x - 120) = 0$
$x(x-10) + 12(x-10) = 0$
$(x-10)(x+12) = 0$

$x-10=0$	$x+12=0$
$x = 10$	$x = -12$

reject

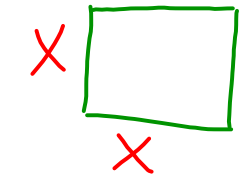
$-120 \mid 2$
$-10 \cdot 12 \mid -10+12 = 2$

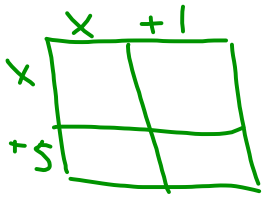
y =
$C \div X$
Table of Values
2nd Graph

10, 12

Apr 7-7:37 PM

4. The length of a rectangle is 5 more than the side of a square and the width of the rectangle is 1 more than the side of the square. If the area of the rectangle is 96, find the length of the side of the square.





$A = 96$ $X+5$

$X+1$

$(X+1)(X+5) = 96$

$X^2+6X+5 = 96$

$-96 \quad -96$

$X^2+6X-91 = 0$

Apr 8-3:58 PM