Section 5.8: cont'd:

Wednesday, November 06, 2013
9:33 AM

Assignment #4 due on

Tues, Nov 12

Quiz #4 on

Friday, Nov 15

Solve:

$$|x^2 + 2x - 19| = 16$$

$x^2 + 2x - 19 = 16$ or $x^2 + 2x - 19 = -16$

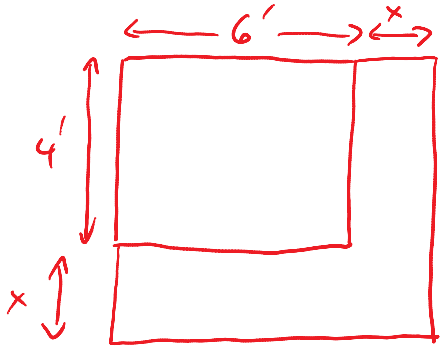
$x^2 + 2x - 35 = 0$ $\qquad$ $x^2 + 2x - 3 = 0$

$(x+7)(x-5) = 0$ $\qquad$ $(x-1)(x+3) = 0$

$x = -7, 5$ $\qquad$ $x = 1, -3$

$\{-7, -3, 1, 5\}$

Mary has a rectangular garden that measures 4 feet by 6 feet. If she wishes to increase the length and width by the same amount to have a flower bed of 48 square feet, then what will be the new dimensions of her garden?



$A = lw$

$48 = (6+x)(4+x)$

$48 = x^2 + 10x + 24$

$0 = x^2 + 10x - 24$

ac: -24

1 24

2 +12

3 8

4 6

$0 = (x+12)(x-2)$

$x = -12, 2$

Mary's new garden is 8' by 6'.

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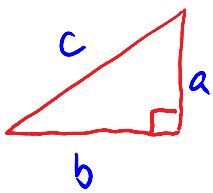
recall: for right triangles:



$a^2 + b^2 = c^2$ Pythagorean theorem