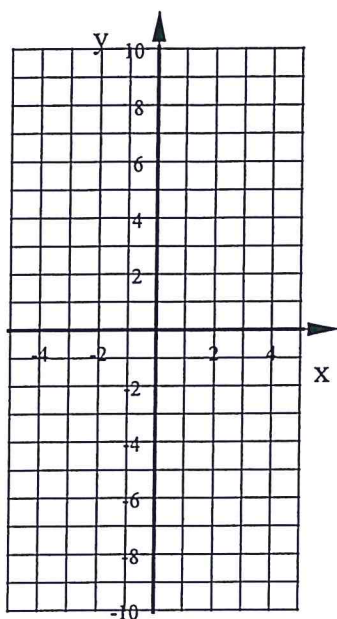


# Algebra 2 Bellwork Tuesday, November 24, 2015

1. Graph this quadratic using at least five points:  $y = (x + 2)(x - 4)$



Find the each solution to each equation by factoring or using square roots.

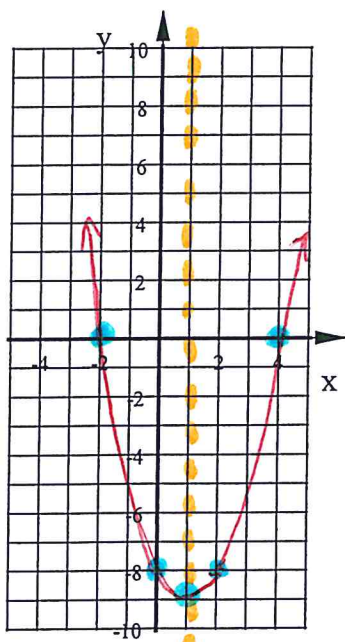
2.  $12x^2 + 30x = 72$

3.  $2(x + 5)^2 + 4 = 44$

# Algebra 2 Bellwork Tuesday, November 24, 2015

1. Graph this quadratic using at least five points:  $y = (x + 2)(x - 4)$

**Answers**



X-int = -2, 4

LOS:  $x = \frac{-2+4}{2} = 1$

Vertex = (1, -9)  
 $\hookrightarrow (1+2)(1-4)$   
 $= (3)(-3) = -9$

Y-int = (0+2)(0-4)  
 $= (2)(-4) = -8$

Find the each solution to each equation by factoring or using square roots.

2.  $12x^2 + 30x = 72$

FACTOR

$12x^2 + 30x - 72 = 0$

$6(2x^2 + 5x - 12) = 0$

$6(2x - 3)(x + 4) = 0$

$x = \frac{3}{2}, -4$

3.  $2(x + 5)^2 + 4 = 44$   
 Sep roots  
 $-4 \quad -4$

$x = -5 \pm 2\sqrt{5}$

$\frac{2(x+5)^2}{2} = \frac{40}{2}$   
 $\sqrt{(x+5)^2} = \sqrt{20} \rightarrow 14.5$   
 $x+5 = \pm 2\sqrt{5}$