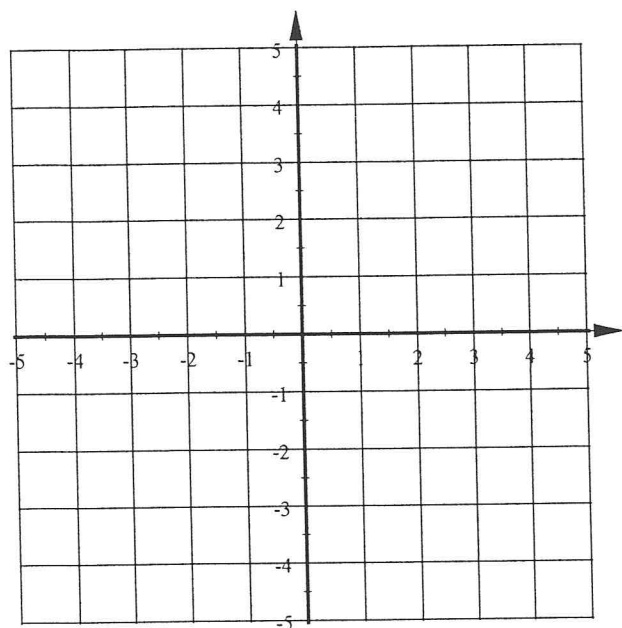


# Algebra 2 Bellwork Thursday, October 30, 2014

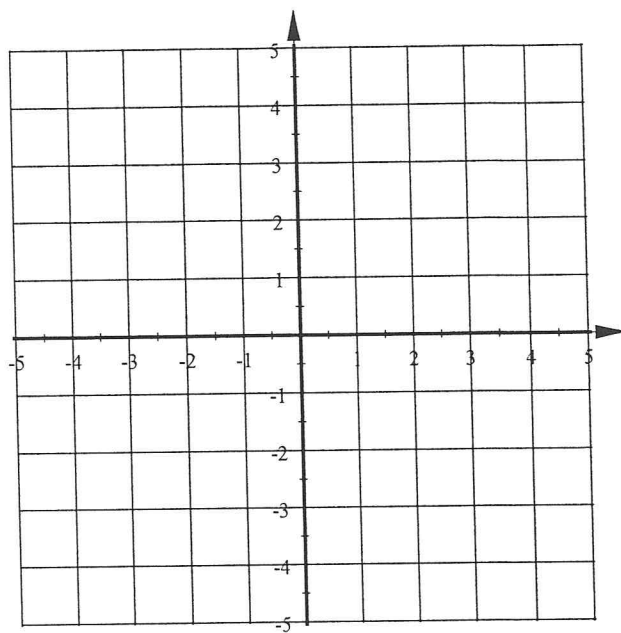
For each quadratic do the the following:

Find the Equation for the Line of Symmetry, Find the coordinates of the Vertex, Find the y-intercept, then graph the quadratic using 5 points.

1.  $y = x^2 - 2x - 3$



2.  $y = -2(x + 3)^2 + 5$



Factor each completely.

3.  $15m^2 + 2m - 8$

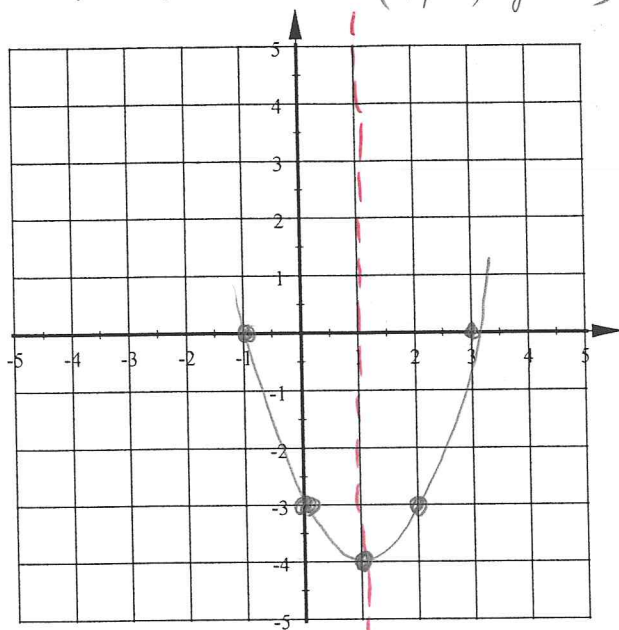
4.  $4g^3 - 48g^2 + 144g$

5.  $72A^2 - 128$

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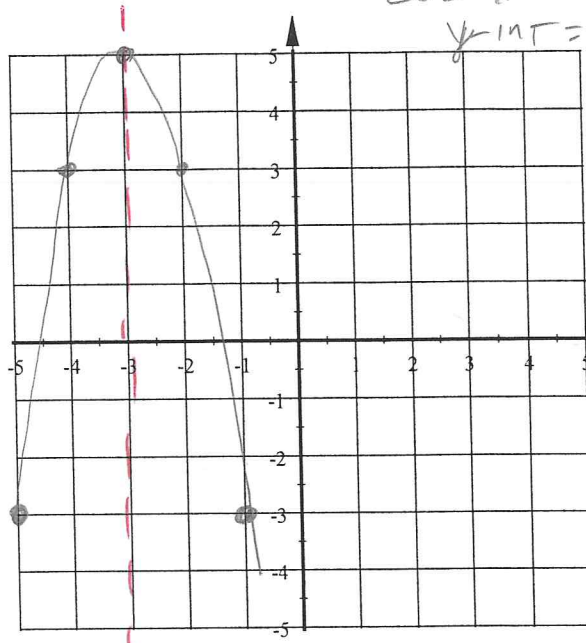
Find the Equation for the Line of Symmetry, Find the coordinates of the Vertex, Find the y-intercept, then graph the quadratic using 5 points.

1.  $y = x^2 - 2x - 3$   
 $1 - 2 - 3$   
 LOS:  $x = \frac{2}{2} = 1$   
 Vertex  $(1, -4)$  y-int = -3



2.  $y = -2(x + 3)^2 + 5$

Vertex  $(-3, 5)$   
 LOS  $x = -3$   
 y-int = -13



$\sqrt{1x-2} \downarrow -2$   
 $\sqrt{4x-2} \rightarrow \frac{2}{2} - 8$

Factor each completely.

3.  $15m^2 + 2m - 8 = (5m + 4)(3m - 2)$

$\begin{array}{c} -120 \\ +12 \quad -10 \\ +2 \end{array}$

	$3m$	$-2$
$5m$	$15m^2$	$-10m$
$+4$	$+12m$	$-8$

4.  $4g^3 - 48g^2 + 144g = 4g(g-6)(g-6)$

$4g(g^2 - 12g + 36)$

$\begin{array}{c} +36 \\ -6 \quad -6 \\ -12 \end{array}$

5.  $72A^2 - 128$

$8(9A^2 - 16)$

$8(3A + 4)(3A - 4)$