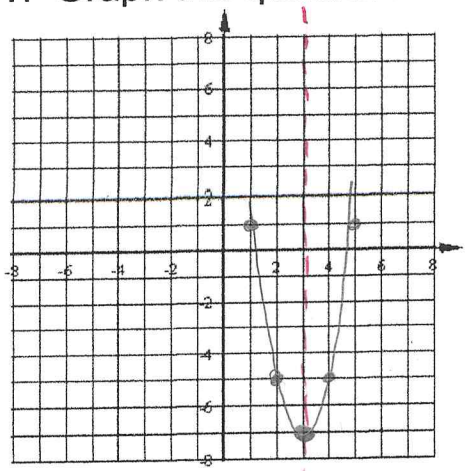
ANSWERS

1. Graph this quadratic using five points.



$y = 2x^2 - 12x + 11$

LOS: $x = \frac{12}{4} = 3$

Vertex $(3, -7)$

y-int $= 11$

Vertical stretch Factor $= 2$

x	y
2	-5
1	1

or

1 | 1 x 2 → 1 | 2

4 | 4 x 2 → 2 | 8

2. Find the minimum value of this function and when it occurs:

$y = 6x^2 + 21x - 7$

$\frac{-b}{2a} = \frac{-21}{12} = -1.75$

$(-1.75, -25.375)$

Min Value: $y = -25.375$

When min occurs: $x = -1.75$

ALG 2 BELLWORK
TUE. OCT 28, 2014

3. A company needs to minimize their costs. The equation below gives their weekly costs (C) as a function of the number of hours each employee works (h).

$$C(h) = 0.65h^2 - 45.5h + 876$$

LOS $h = \frac{45.5}{2(.65)} = 35$

Find the minimum costs the company can incur and how many hours each employee should work to reach this minimum.

Min Costs of 79.75 when employees work 35 hours

$(35, 79.75)$

$C(35) =$

4. Expand each.

a) $(7c - 9)(2c + 3)$

$= 14c^2 + 3c - 27$

	7c	-9
2c	$14c^2$	-18c
+3	+21c	-27

b) $(M - 4)(M - 8)$

$= M^2 - 12M + 32$

	m	-4
m	m^2	-4m
-8	-8m	+32

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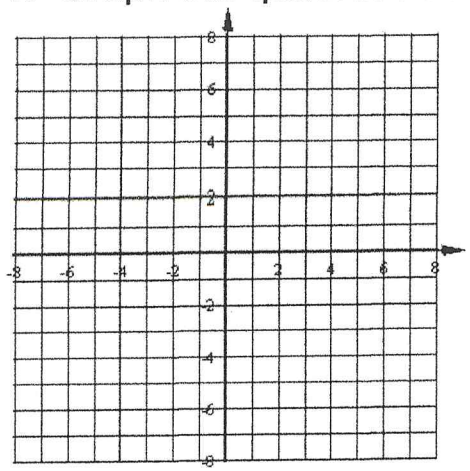

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Min Value:

When min occurs:

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