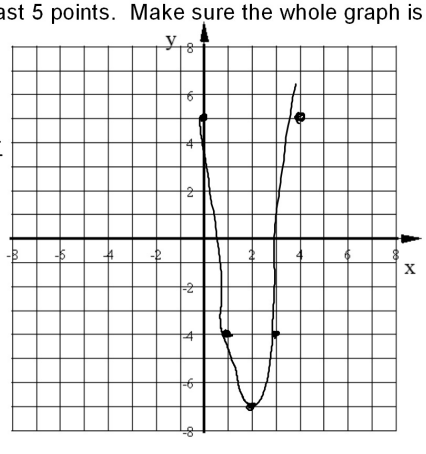
Algebra 1 Bellwork Tuesday, February 11, 2014

1. Graph using at least 5 points. Make sure the whole graph is shown.

$y = 3(x - 2)^2 - 7$

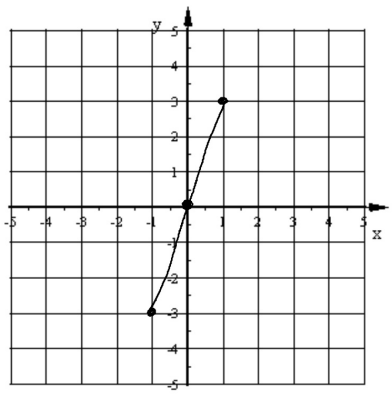
X	Y
0	5
1	-4
2	-7
3	-4



2. Graph this direct variation

$y = 3x$

X	Y
-1	
1	



3. Write a function rule for each table of values.

a)

X	Y
-8	1.6
-3	0.6
2	-0.4
7	-1.4
11	-2.2

$-.2x = y$

$y = \frac{x}{-5}$

b)

X	Y
-15	-0.1
-6	8.9
1	15.9
13	27.9
31	45.9

$-0.1(-15) + 14.9$

14.9

14.9

14.9

14.9

$y = x + 14.9$

4. Use this function: $T(c) = -c^2 + 4c$

Find the range that comes from this domain: { -2, 2, 3}

$T(-2) = -12$

$T(2) = 4$

$T(3) = 3$

$-C = -1 \cdot C$

Range $\{-12, 3, 4\}$

5. The number of chairs produced varies directly with the number of employees at work. When there are 12 employees working the shop makes 78 chairs.

y = #chairs x = #employees

a) Model this situation with a direct variation equation.

$K = \frac{y}{x} = \frac{78}{12} = 6.5$ $\quad y = 6.5x$

b) How many employees are needed to make 200 chairs?

$\frac{78 \text{ ch}}{12 \text{ emp}} = \frac{200 \text{ ch}}{x \text{ emp}}$

y

$\frac{200}{6.5} = \frac{6.5x}{6.5}$

$30.7 = x$

$31 = x$