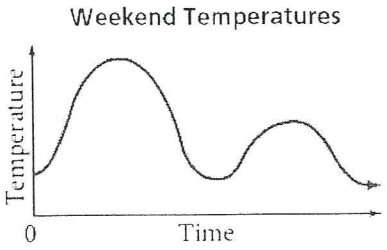
Algebra 1 Bellwork Monday, December 8, 2014

1. Describe what is happening in each section of the graph below.



2. Use these functions: $n(a) = -a^2 - 4$ $b(y) = 8 - 5y$

a) Find $b(-3)$

b) Find the range of $n(a)$ for the following domain: $\{-2, -1, 0, 1\}$

c) Find y if $b(y) = 30$

d) Find $6n(2) + 2b(3)$

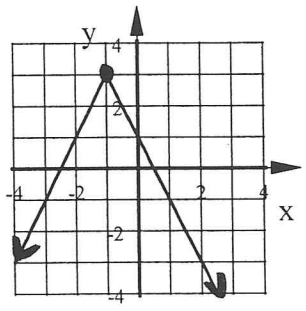
3. Is each of the following relations a function?

a) $(-5, 8), (-8, 5), (3, 2), (6, 5), (-3, 2)$

b)

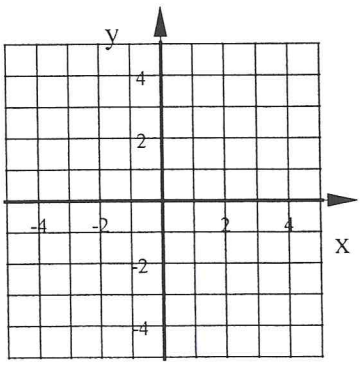
X	6	9	1	6
Y	2	8	5	3

4. Find the domain and range of the graph below.

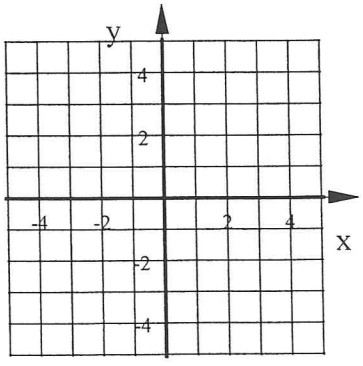


5. Graph each function using at least

a) $y = 3|x - 2| - 4$

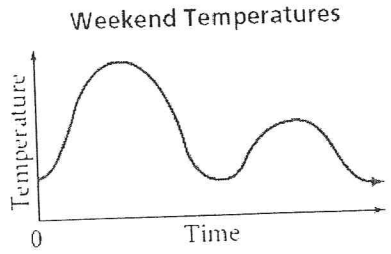


b) $y = -2(x + 3)^2 + 5$



Algebra 1 Bellwork Monday, December 8, 2014 ANSWERS

1. Describe what is happening in each section of the graph below.



2. Use these functions: $n(a) = -a^2 - 4$ $b(y) = 8 - 5y$

a) Find $b(-3)$ $= 23$

b) Find the range of $n(a)$ for the following domain: $\{-2, -1, 0, 1\}$

$n(-2) = -8$ $n(0) = -4$
$n(-1) = -5$ $n(1) = -5$

Range $\{-8, -5, -4\}$

c) Find y if $b(y) = 30$

$30 = 8 - 5y$ $\quad -8 \quad -8$

$\frac{22}{-5} = \frac{-5y}{-5}$ $\quad y = -4.4$

d) Find $6n(2) + 2b(3)$ $= -62$

$n(2) = -(2)^2 - 4 = -8$

$b(3) = 8 - 5(3) = -7$

$6(-8) + 2(-7)$

$-48 + -14$

3. Is each of the following relations a function?

a) $(-5, 8), (-8, 5), (3, 2), (6, 5), (-3, 2)$

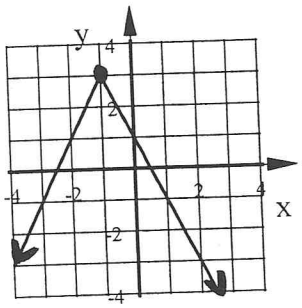
Yes

b)

X	6	9	1	6
Y	2	8	5	3

NO

4. Find the domain and range of the graph below.



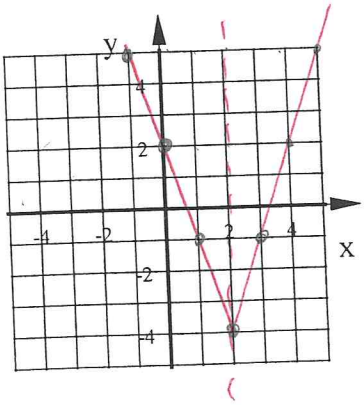
Domain: All Real #s

Range: $y \leq 3$

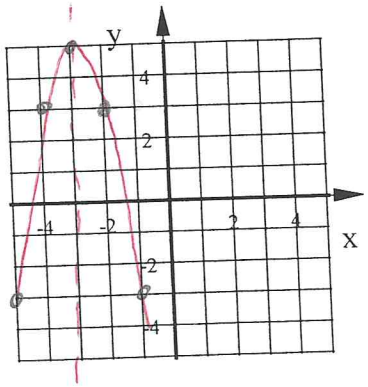
5. Graph each function using at least

a) $y = 3|x - 2| - 4$

X	Y
-2	8
-1	5
0	2
1	-1
2	-4
3	-1
4	



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



X	Y
-2	3
-1	-3
0	-13
1	-27
2	-45
-3	5
-4	3