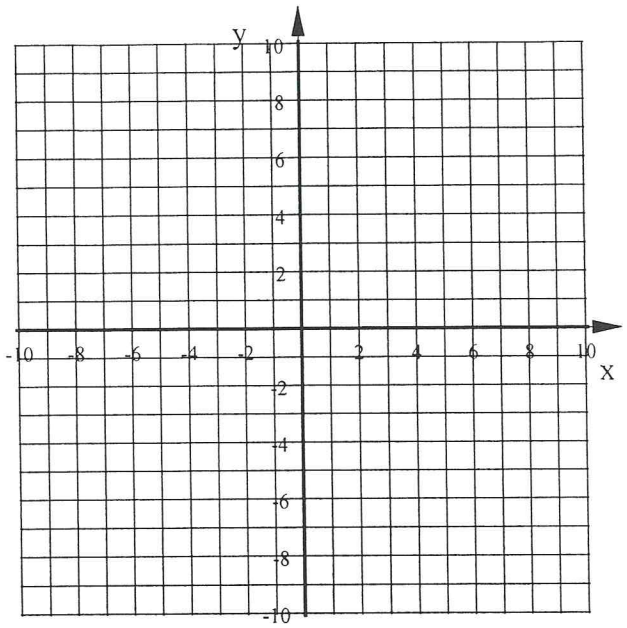
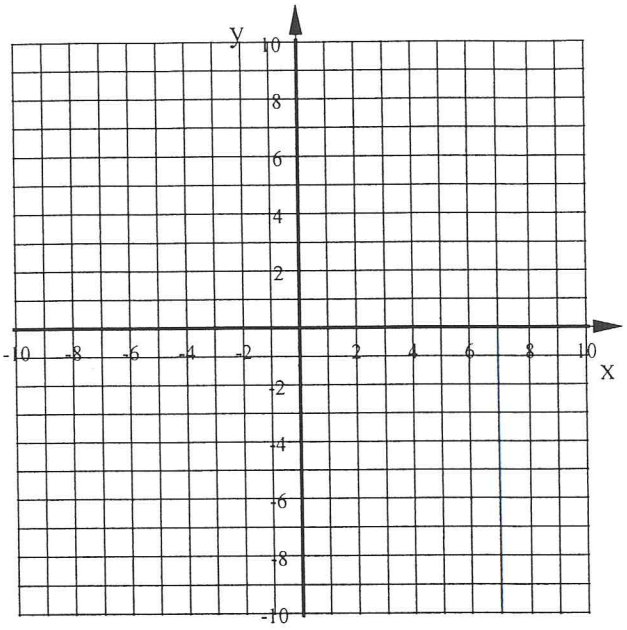
Algebra 1 Bellwork Thursday, December 4, 2014

Graph each using at least 5 points. Make sure a picture of the whole shape of the graph is shown.

1. $f(x) = -3(x+2)^2 + 8$



2. $y = -4|x-3| + 6$



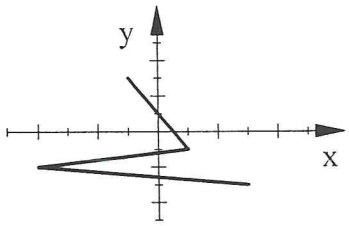
3. Is each relation a function?

a) $(-6,4),(-2,6),(1,4),(5,-1),(2,5)$

b) The table below

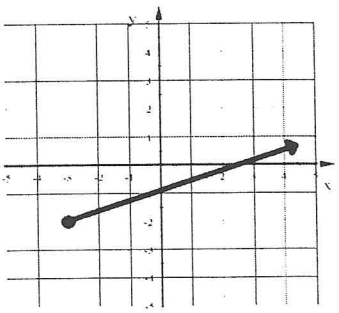
X	Y
8	6
−3	−9
2	−7
−3	4

c) The graph below

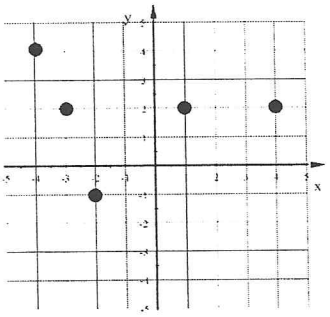


4. State the domain and range of each graph.

a)



b)



5. Use these two functions: $h(m) = 3x^2 - 10$ $w(c) = 4c - 1$

a) Find $h(-4)$

b) Find c if $w(c) = 25$

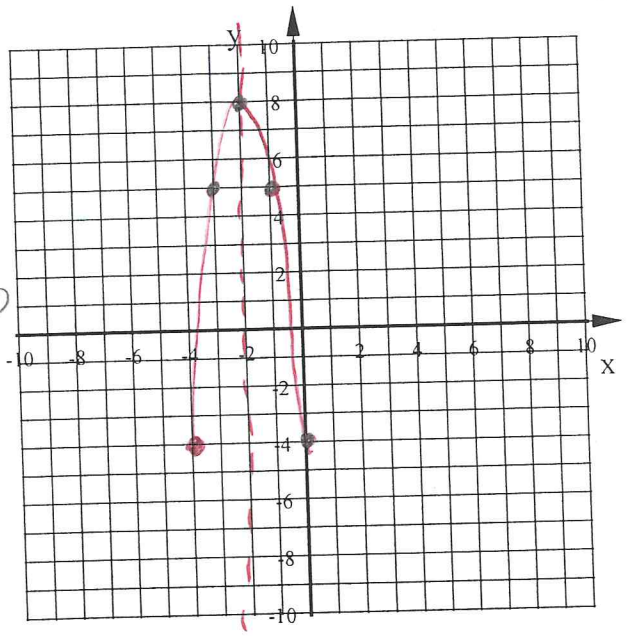
c) Find $10h(2) + w(2)$

Algebra 1 Bellwork Thursday, December 4, 2014 ANSWERS

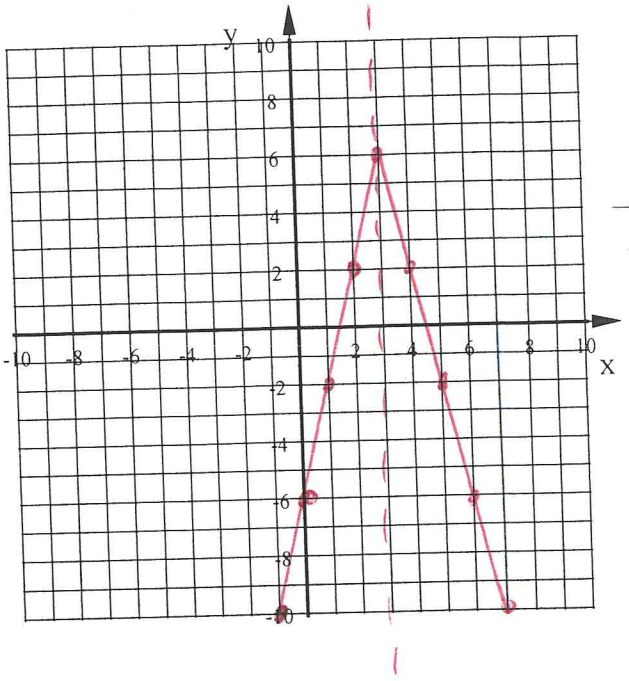
Graph each using at least 5 points. Make sure a picture of the whole shape of the graph is shown.

1. $f(x) = -3(x+2)^2 + 8$

X	Y
-2	8
-1	5
0	-4
1	-19
2	-40
-3	5



2. $y = -4|x-3| + 6$



X	Y
-2	-14
-1	-10
0	-6
1	-2
2	2
3	6
4	2

3. Is each relation a function?

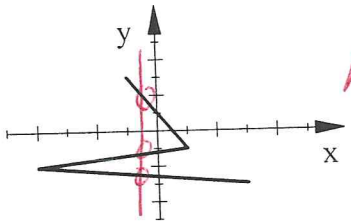
a) $(-6,4),(-2,6),(1,4),(5,-1),(2,5)$ YES

b) The table below

X	Y
8	6
-3	-9
2	-7
-3	4

NO

c) The graph below

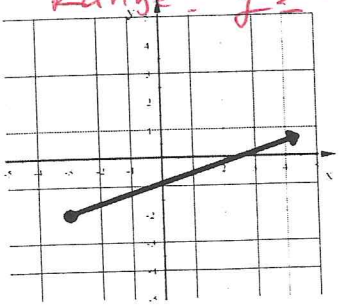


NO

4. State the domain and range of each graph.

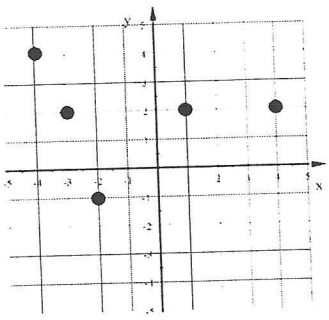
a) Domain: $x \geq -3$

Range: $y \geq -2$



b) Domain: $\{-4, -3, -2, 1, 4\}$

Range: $\{-1, 2, 4\}$



5. Use these two functions: $h(m) = 3x^2 - 10$ $w(c) = 4c - 1$

a) Find $h(-4)$ $= 3(-4)^2 - 10$

$= 3(16) - 10$

$= 48 - 10 = 38$

38

b) Find c if $w(c) = 25$

$25 = 4c - 1$

$+1 \quad +1$

$26 = 4c$

$\frac{26}{4} = \frac{4c}{4}$

$6.5 = c$

c) Find $10h(2) + w(2)$

$h(2) = 3(2)^2 - 10 = 2$

$w(2) = 4(2) - 1 = 7$

$10(2) + 7$

$= 20 + 7$

$= 27$