Algebra a1 Bellwork Monday, December 15, 2014

Write the equation of each Absolute Value function described.

1. Translated 6 units left, 3 units down, 5 times taller, and opens down.

2. Translated 1unit right, 9 units down, half as tall, and opens up.

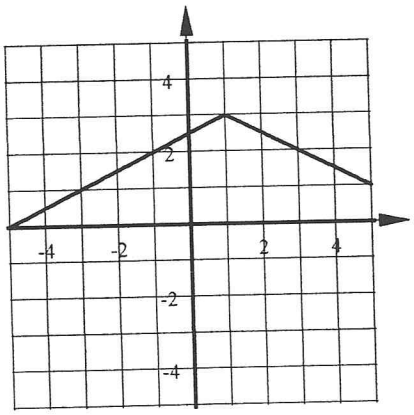
3. Vertex is $(-4, 0)$, opens down, 3 times taller.

4. Describe all the transformations of $y = |x|$ that this equation represents:

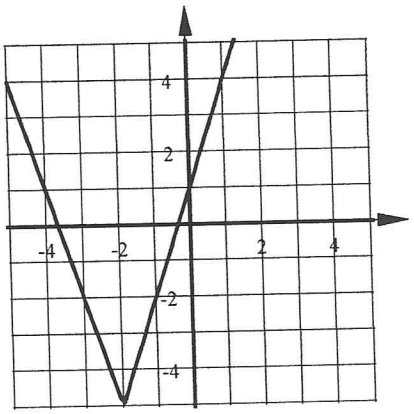
$y = -\frac{2}{3}|x + 7| + 2$

5. Write the equation of each Absolute Value Function shown:

a)

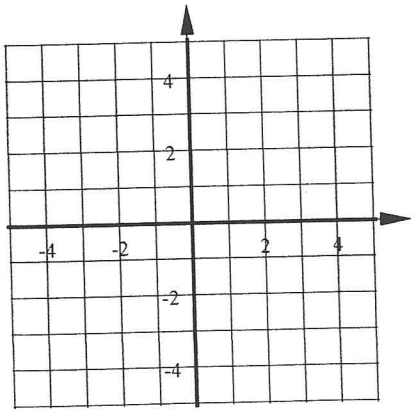


b)

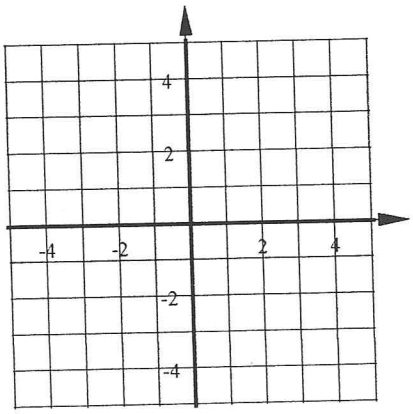


6. Graph each using at least 5 points.

a) $y = \frac{3}{2}|x + 2| - 4$



b) $y = -2|x - 3| + 1$



ANSWERS

Algebra 21 Bellwork Monday, December 15, 2014

Write the equation of each Absolute Value function described.

1. Translated 6 units left, 3 units down, 5 times taller, and opens down.

$y = -5|x+6| - 3$

2. Translated 1unit right, 9 units down, half as tall, and opens up.

$y = \frac{1}{2}|x-1| - 9$

3. Vertex is $(-4, 0)$, opens down, 3 times taller.

4 left

$y = -3|x+4|$

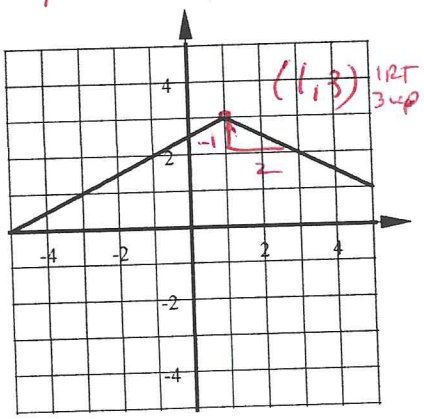
4. Describe all the transformations of $y = |x|$ that this equation represents:

$y = -\frac{2}{3}|x+7| + 2$

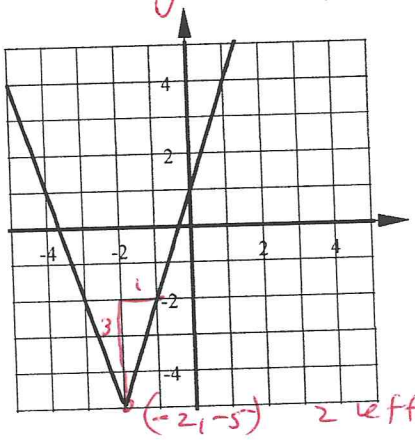
7 units left
2 units up
2/3 as tall
opens down

5. Write the equation of each Absolute Value Function shown:

a) $y = -\frac{1}{2}|x-1| + 3$

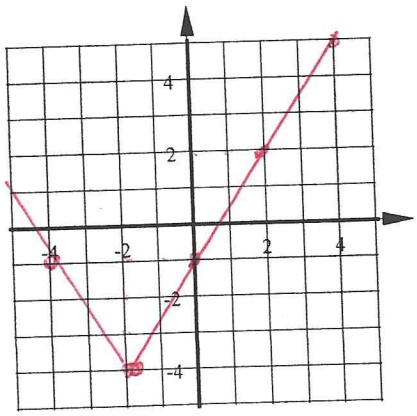


b) $y = 3|x+2| - 5$



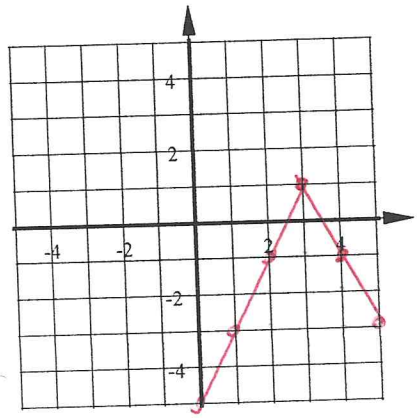
6. Graph each using at least 5 points.

a) $y = \frac{3}{2}|x+2| - 4$



2 left
4 down
opens up
3/2 as tall

b) $y = -2|x-3| + 1$



3 RT
1 up
2 x taller
opens down