Algebra 1 Hwk #12 Sec 6-7 Name:

1. Write the equation for each translation of $y = |x|$

a) 4 units right and 7 units down.

b) 9 units left and 3 units up.

2. Write the coordinates of the vertex of each absolute value function.

a) $y = 3|x - 11| + 8$

b) $y = -2|x + 5| - 1$

3. Write the equation for each transformation of $y = |x|$

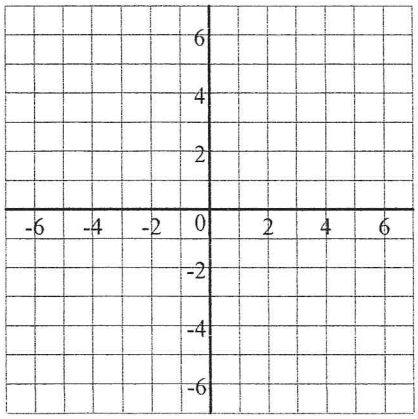
a) Slope of sides is ± 4, it opens down and the vertex is $(2, -5)$.

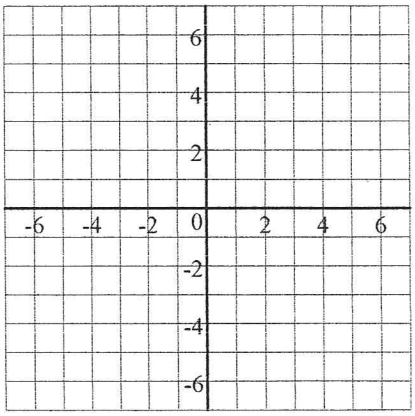
b) Slope fo the sides $\pm\frac{2}{5}$, it opens up and the vertex is $(-12, 26)$

4. Graph each absolute value function using at least 5 points.

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

b) $y = -3|x + 2| + 4$





5. Write the equation of each absolute value function.

a) EQ

b) EQ