

Without using your graphing calculator, describe the transformations of the parent function $y = |x|$ to create the following functions.

1. $y = |x - 4|$

2. $y = |x| + 9$

3. $y = 2|x + 1|$

4. $y = -3|x|$

5. $y = -2|x + 7| - 1$

6. $y = 4|x - 5|$

7. Write an equation for the absolute function described. The parent function $y = |x|$ reflected across the x-axis, then shifted left 2 units.

Equation:

8. The parent function $y = |x|$ stretched vertically by a factor of 2, shifted right 5 units and up 3 units.

Equation:

9. Write an equation for the graphs shown below.

