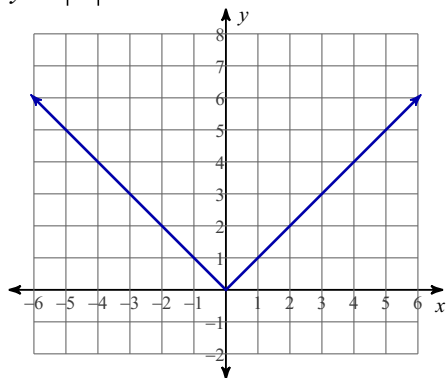


Warm-Ups - Graphing Absolute Value Functions

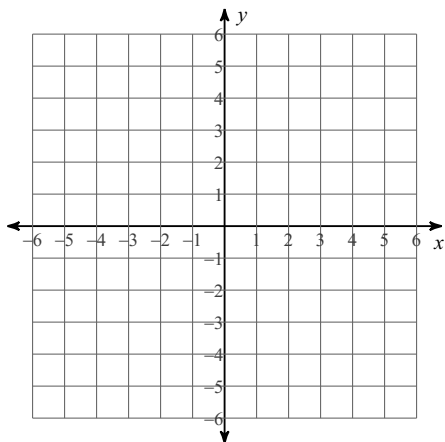
1) Below is the parent graph of the absolute value function.

$$y = |x|$$

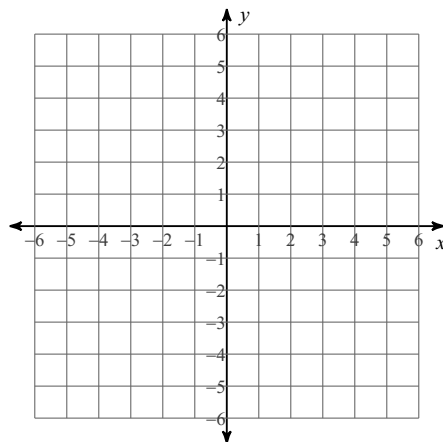


Based on the parent graph of the function above, graph each equation. Consider the transformations you learned this unit. Give the DOMAIN and the RANGE for each function.

2) $y = |x| - 2$



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



Graph the piecewise function.

$$4) \begin{cases} x + 3, & -7 < x < 0 \\ x^2, & 0 \leq x < 2 \\ -\frac{1}{2}x + 5, & x \geq 2 \end{cases}$$

5) Give the DOMAIN and RANGE of the entire piecewise function in problem 4. (Consider it all one function, not three separate pieces.)

