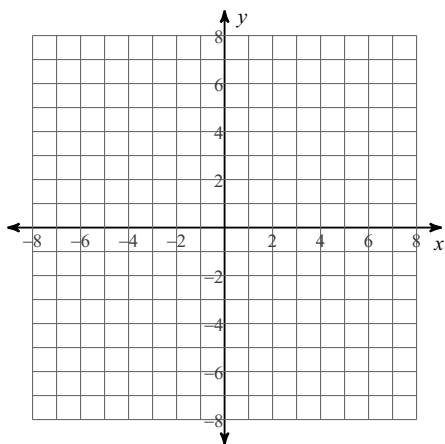


8.13 Piecewise Functions

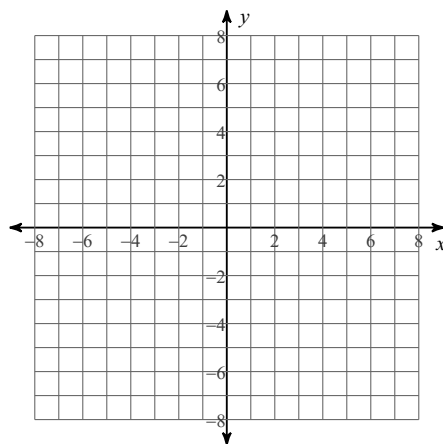
Date _____ Period _____

Sketch the graph of each function.

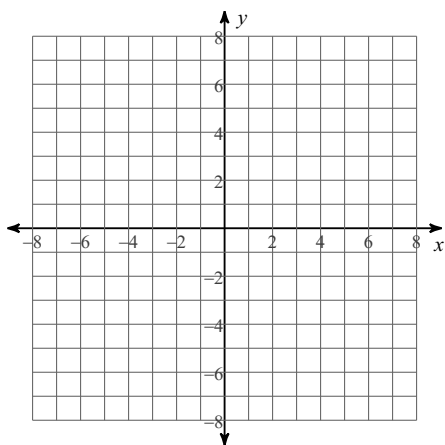
1) $f(x) = \begin{cases} 6, & x \leq 4 \\ -x + 3, & x > 4 \end{cases}$



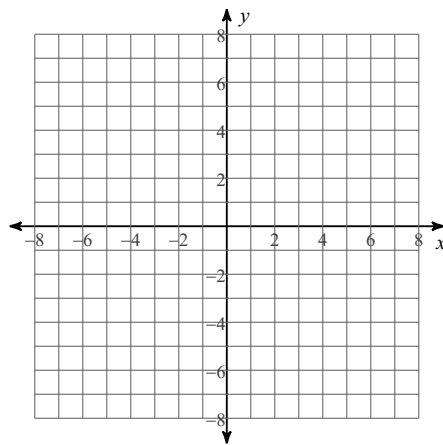
2) $f(x) = \begin{cases} -1, & x < -4 \\ x - 2, & x \geq -4 \end{cases}$



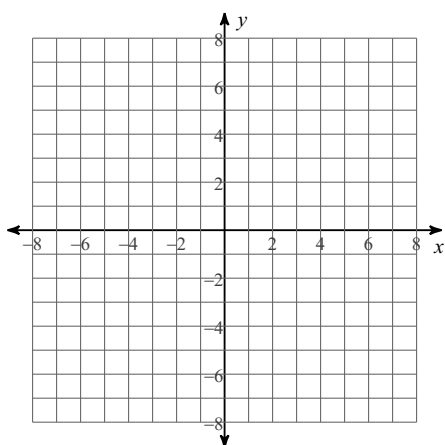
3) $g(x) = \begin{cases} x - 4, & x \leq 4 \\ |x|, & x > 4 \end{cases}$



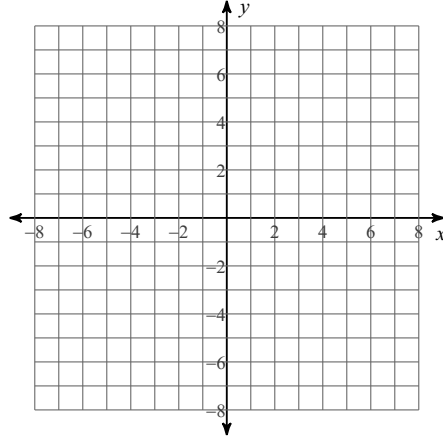
4) $g(x) = \begin{cases} -5, & x < -3 \\ -3, & x \geq -3 \end{cases}$



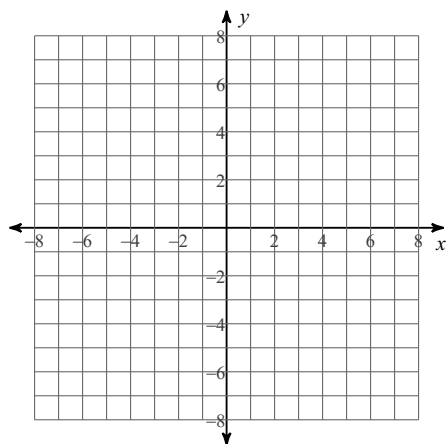
5) $f(x) = \begin{cases} 4 - x^2, & x \leq 0 \\ x^2 - 3, & x > 0 \end{cases}$



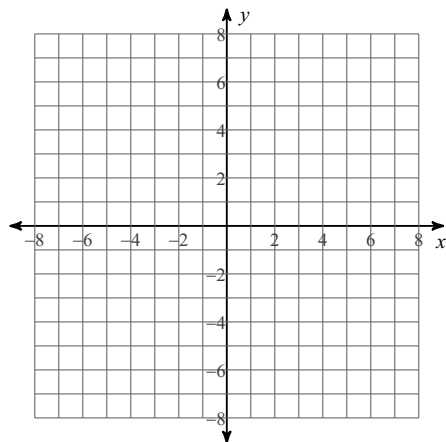
6) $f(x) = \begin{cases} 2, & x \leq -4 \\ -x - 2, & x > -4 \end{cases}$



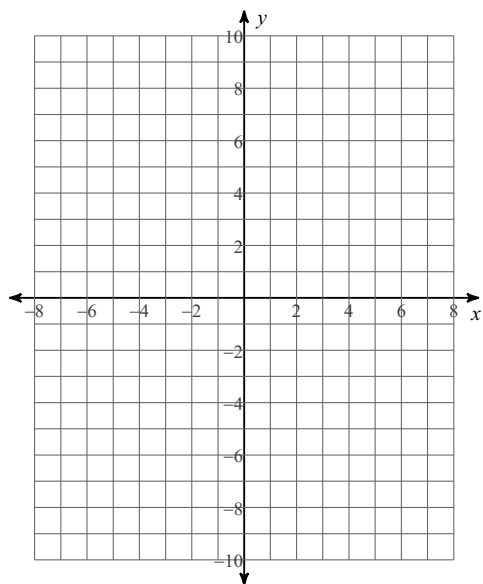
$$7) f(x) = \begin{cases} -2x - 2, & x \leq 0 \\ x + 3, & x > 0 \end{cases}$$



$$8) f(x) = \begin{cases} 2x + 3 & \text{if } x \leq 0 \\ x^2 - 5x + 3 & \text{if } x > 0 \end{cases}$$



$$9) f(x) = \begin{cases} -2x^2 + 9 & \text{if } x \leq 1 \\ -2x + 9 & \text{if } x > 1 \end{cases}$$



$$10) f(x) = \begin{cases} 2x^2 + 5, & \text{if } x \leq 0 \\ 5, & \text{if } x > 0 \end{cases}$$

