



**PIECEWISE FUNCTIONS WORKSHEET #1**

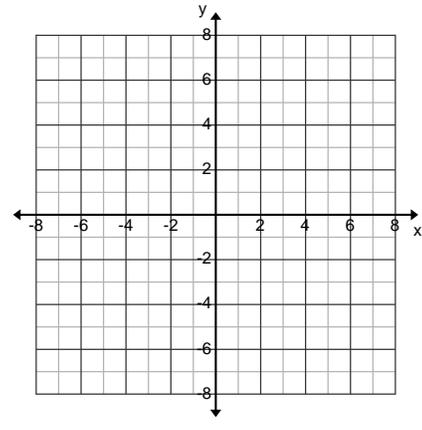
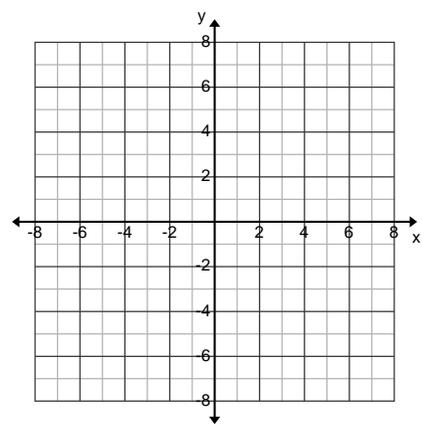
Evaluate the following for  $f(x) = \begin{cases} -2|x+1|, & x \leq 1 \\ \frac{1}{2}x - 5, & 1 < x < 3 \\ 6 - 2x, & x \geq 3 \end{cases}$

- 1)  $f(10)$                       2)  $f(-3)$                       3)  $f(2)$                       4)  $f(0)$

Graph the following piecewise functions.

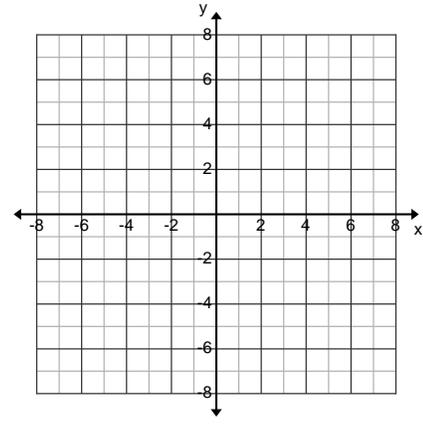
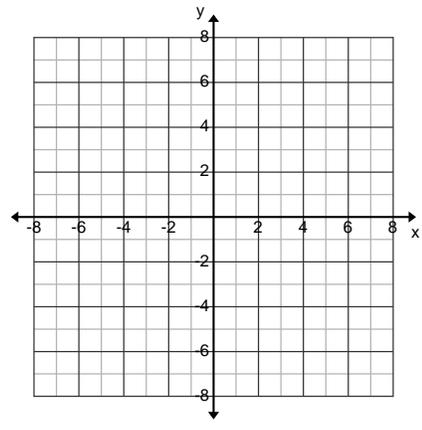
5)  $f(x) = \begin{cases} -2, & x < 0 \\ 3, & x \geq 0 \end{cases}$

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

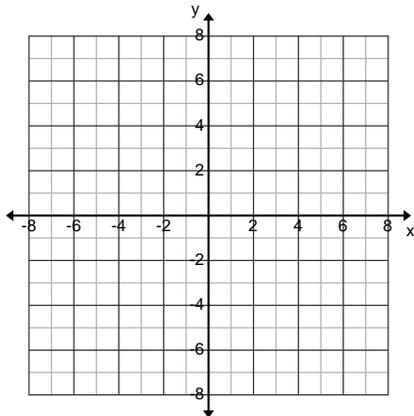


7)  $f(x) = \begin{cases} -3x + 2, & x \leq 2 \\ \frac{1}{2}x - 4, & x > 2 \end{cases}$

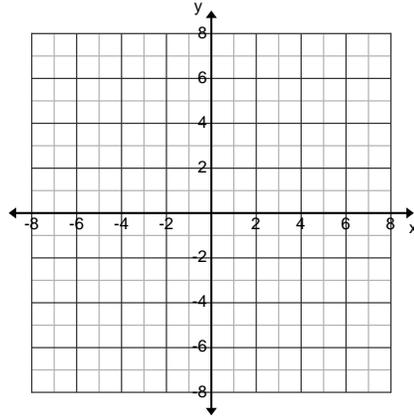
8)  $f(x) = \begin{cases} 3x + 12, & x \leq -3 \\ |x|, & -3 < x < 3 \\ -2, & x \geq 3 \end{cases}$



$$9) f(x) = \begin{cases} -x+1, & x \neq 2 \\ -5, & x = 2 \end{cases}$$

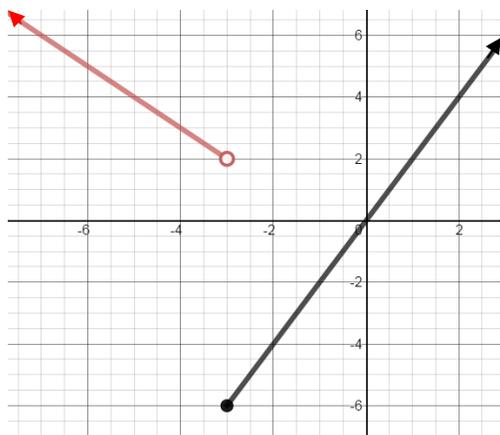


$$10) \text{ Sketch the graph of } f(x) = 3\lceil x \rceil \text{ from } -2 \leq x < 2$$



Write equations for the piecewise functions shown below.

11)



12)

