

# Piecewise Function Worksheet

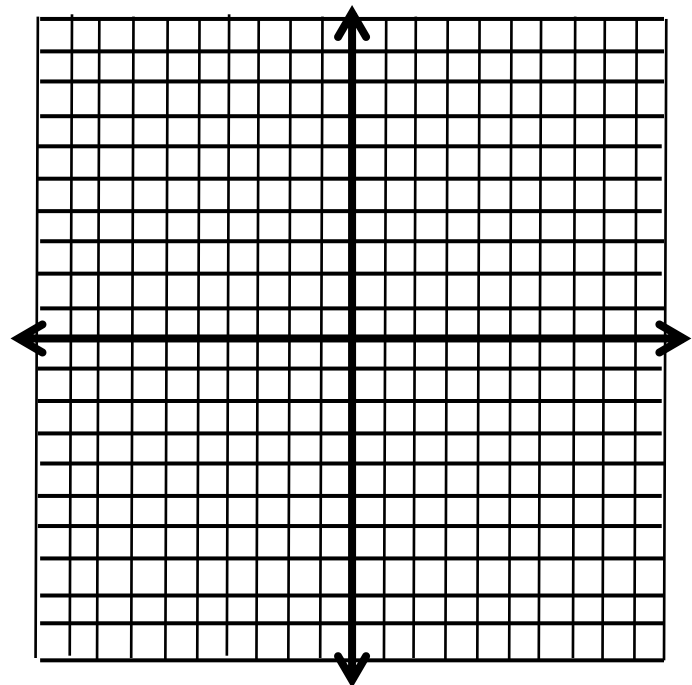
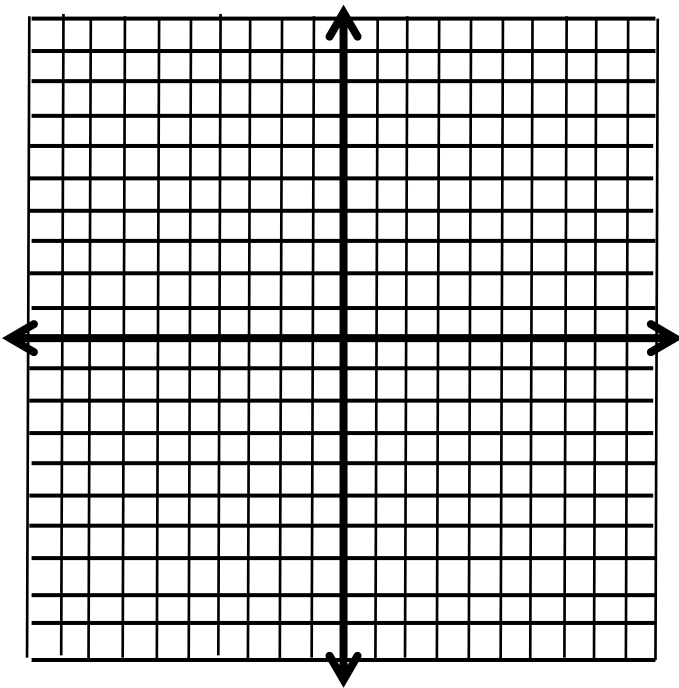
Graph each function.

$$1. f(x) = \begin{cases} -x + 2, & x \leq 0 \\ \frac{1}{2}x + 3, & x > 0 \end{cases}$$

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

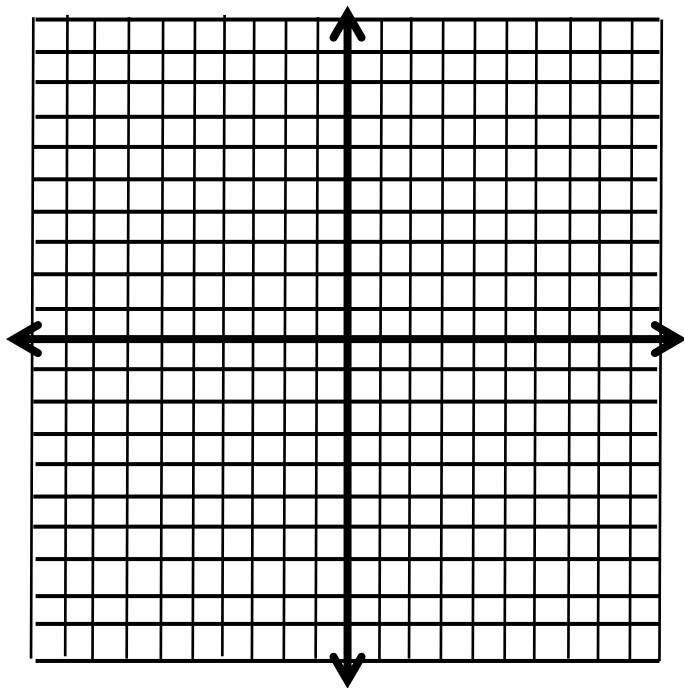
x	f(x) = -x + 2	f(x) = $\frac{1}{2}x + 3$
-3		
-2		
-1		
0		
1		
2		
3		

x	f(x) = -3x - 4	f(x) = x + 1
-4		
-3		
-2		
-1		
0		
1		
2		
3		
4		
5		



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

x	f(x) = -x	f(x) = 2x - 2
-3		
-2		
-1		
0		
1		
2		
3		



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

x	f(x) = -x - 4	f(x) = $-\frac{1}{2}x$	f(x) = -1
-4			
-3			
-2			
-1			
0			
1			
2			
3			
4			

