

Piecewise Function: \_\_\_\_\_

\_\_\_\_\_

**I. Evaluating Piecewise Functions****Ex. Evaluate each function at the indicated values.**

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

a.)  $f(0) =$

b.)  $f(2) =$

c.)  $f(20) =$

2.  $f(x) = \begin{cases} x - 2, & x < 1 \\ 3x - 5, & x \geq 1 \end{cases}$

a.)  $f(-1) =$

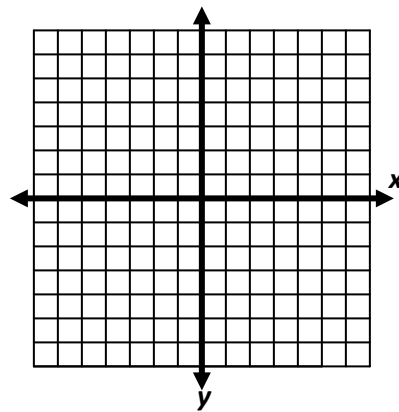
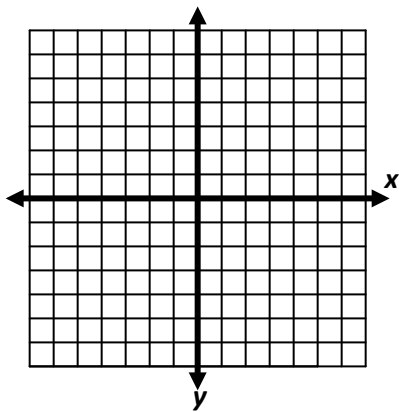
b.)  $f(1) =$

c.)  $f(0) =$

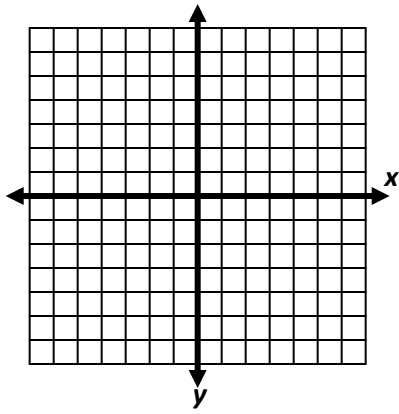
**II. Graphing Piecewise Functions****Ex. Graph each function. Then state the domain and range.**

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

2.  $f(x) = \begin{cases} 2x, & x \geq 1 \\ -x + 5, & x < 1 \end{cases}$



3.  $f(x) = \begin{cases} x+6, & x \leq -3 \\ -\frac{2}{3}x-3, & x > -3 \end{cases}$



4.  $f(x) = \begin{cases} 3, & -1 \leq x < 2 \\ 5, & 2 \leq x < 4 \\ 8, & 4 \leq x < 6 \end{cases}$

