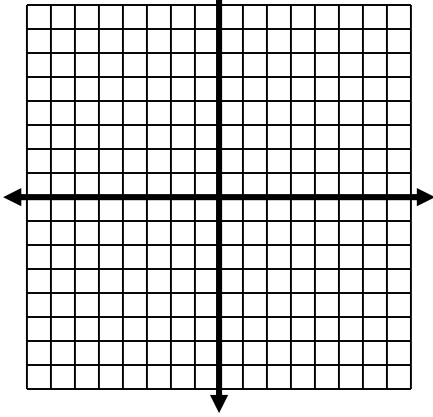


## Graphing Advanced Functions Quiz 2 Review

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



Horizontal Asymptote:

\_\_\_\_\_

Vertical Asymptote:

\_\_\_\_\_

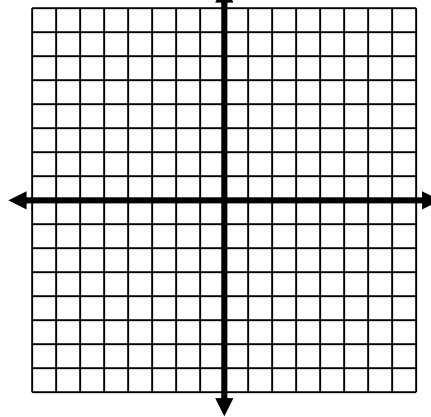
Quadrants:

\_\_\_\_\_

Distance from Asymptotes:

\_\_\_\_\_

2)  $f(x) = \frac{16}{x+1} - 2$



Horizontal Asymptote:

\_\_\_\_\_

Vertical Asymptote:

\_\_\_\_\_

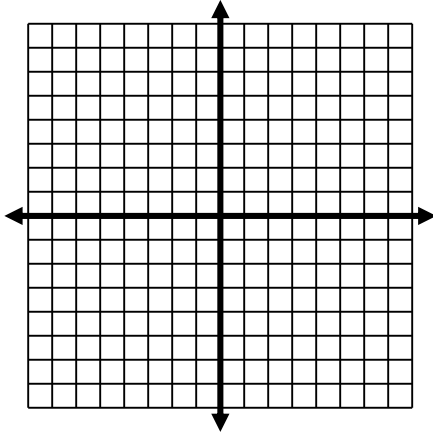
Quadrants:

\_\_\_\_\_

Distance from Asymptotes:

\_\_\_\_\_

3)  $f(x) = 3[x - 2] + 1$



Start:

\_\_\_\_\_

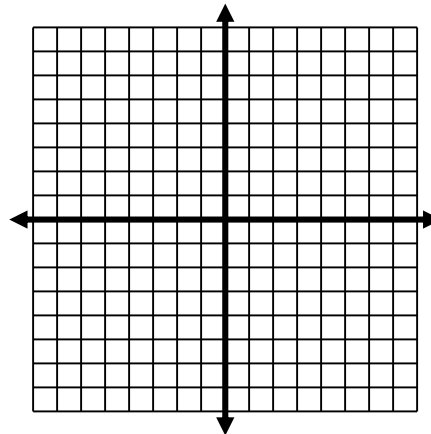
Step Length:

\_\_\_\_\_

Step Height:

\_\_\_\_\_

4)  $f(x) = -\left[\frac{1}{3}x - 1\right] + 2$



Graphing Form:

\_\_\_\_\_

Start:

\_\_\_\_\_

Step Length:

\_\_\_\_\_

Step Height:

\_\_\_\_\_

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

Evaluate the following:

$f(-3) =$  \_\_\_\_\_

$f(-2) =$  \_\_\_\_\_

$f(0) =$  \_\_\_\_\_

$f(3) =$  \_\_\_\_\_

$f(9) =$  \_\_\_\_\_

6) Graph the following Piecewise function:

$$f(x) = \begin{cases} x, & x < -1 \\ -2x + 1, & -1 \leq x < 2 \\ \frac{1}{2}x + 3, & 2 \leq x < 6 \end{cases}$$

