Name:\_\_\_\_\_

Per:\_\_\_\_

POINTS:\_\_\_\_

Be sure to include your work when appropriate.

Describe the transformation of the rational parent function,  $f(x) = \frac{1}{x}$  that will result in the graph of the rational function given.

1. 
$$f(x) = \frac{1}{x+1}$$

2. 
$$f(x) = \frac{1}{x} - 5$$

3. 
$$f(x) = \frac{1}{-0.5x}$$

Name:\_\_\_\_\_

Per:\_\_\_\_

POINTS:\_\_\_\_

## Classwork #21 Quiz

Be sure to include your work when appropriate.

Describe the transformation of the rational parent function,  $f(x) = \frac{1}{x}$  that will result in the graph of the rational function given.

1. 
$$f(x) = \frac{1}{x+1}$$

2. 
$$f(x) = \frac{1}{x} - 5$$

3. 
$$f(x) = \frac{1}{-0.5x}$$

Identify the domain, range, horizontal and vertical asymptotes, x-intercept and y-intercept of the rational function. Write the domain and range in set builder notation.

**4.** 
$$f(x) = \frac{5}{x+7} + 3$$

Identify the domain, range, horizontal and vertical asymptotes, x-intercept and y-intercept of the rational function. Write the domain and range in set builder notation.

**4**. 
$$f(x) = \frac{5}{x+7} + 3$$

5. 
$$f(x) = f(x) = \frac{6}{x+3}$$

**5**. 
$$f(x) = f(x) = \frac{6}{x+3}$$