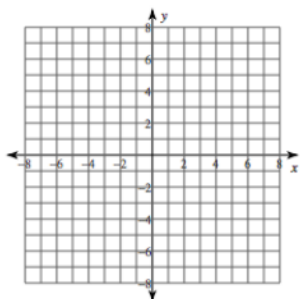


## Rational Functions

Identify the vertical asymptotes, horizontal asymptote, domain, and range of each. Then sketch the graph and list the transformations. List both set notation and interval notation for domain and range.

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



V.A. \_\_\_\_\_

H.A. \_\_\_\_\_

D: \_\_\_\_\_

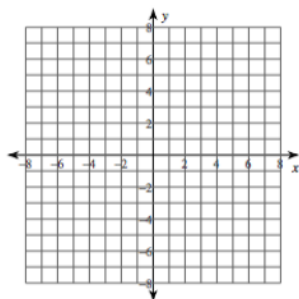
\_\_\_\_\_

R: \_\_\_\_\_

\_\_\_\_\_

Transformations:

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



V.A. \_\_\_\_\_

H.A. \_\_\_\_\_

D: \_\_\_\_\_

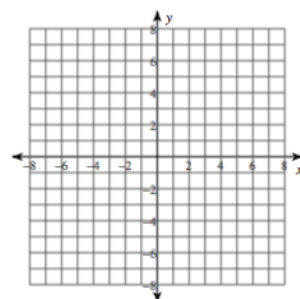
\_\_\_\_\_

R: \_\_\_\_\_

\_\_\_\_\_

Transformations:

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



V.A. \_\_\_\_\_

H.A. \_\_\_\_\_

D: \_\_\_\_\_

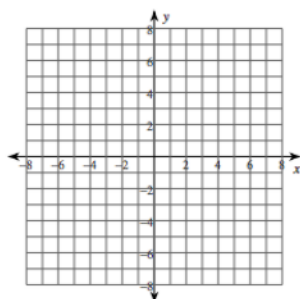
\_\_\_\_\_

R: \_\_\_\_\_

\_\_\_\_\_

Transformations:

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



V.A. \_\_\_\_\_

H.A. \_\_\_\_\_

D: \_\_\_\_\_

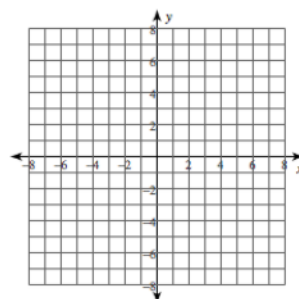
\_\_\_\_\_

R: \_\_\_\_\_

\_\_\_\_\_

Transformations:

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



V.A. \_\_\_\_\_

H.A. \_\_\_\_\_

D: \_\_\_\_\_

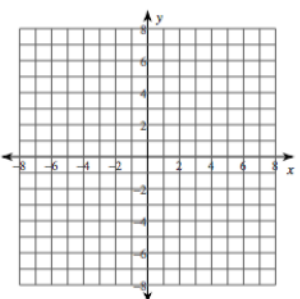
\_\_\_\_\_

R: \_\_\_\_\_

\_\_\_\_\_

Transformations:

6)  $f(x) = \frac{4}{x} + 2$



V.A. \_\_\_\_\_

H.A. \_\_\_\_\_

D: \_\_\_\_\_

\_\_\_\_\_

R: \_\_\_\_\_

\_\_\_\_\_

Transformations: