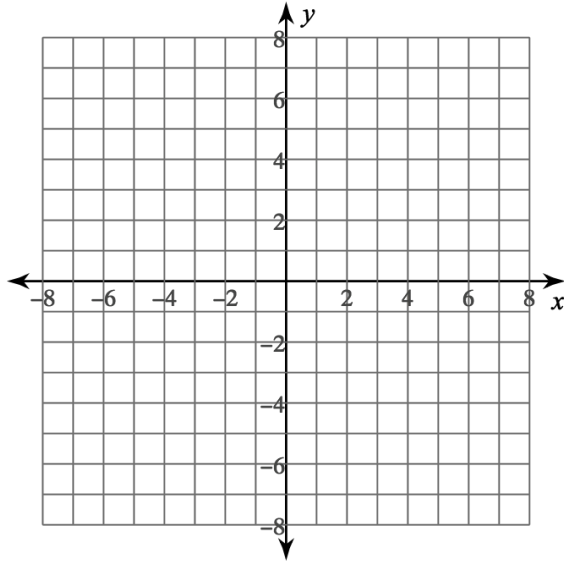


### 5.2 HW: Graphing Rational Functions

Identify the requested information. Then sketch a graph.

1.  $f(x) = \frac{x^2 - 4}{2x^2 + 10x + 12}$



Domain:

Vertical Asymptotes:

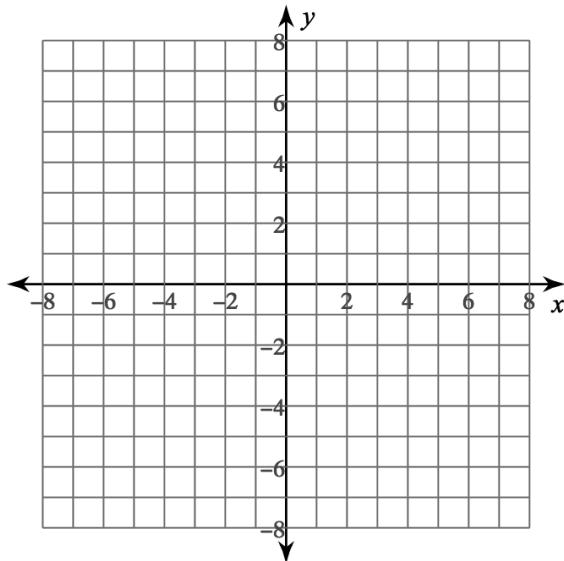
Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

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



Domain:

Vertical Asymptotes:

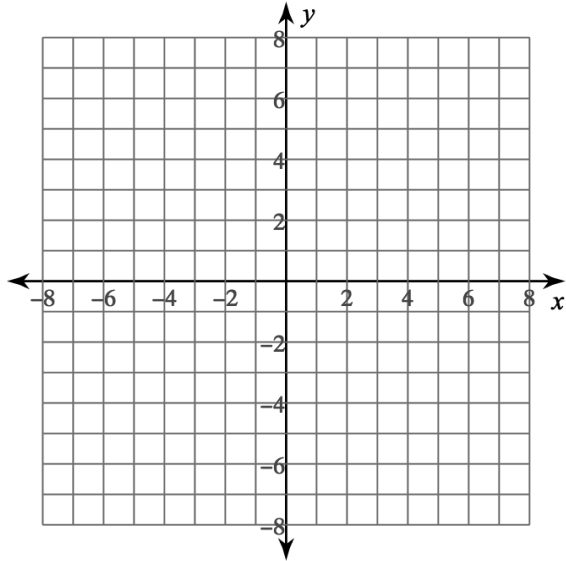
Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

3.  $f(x) = \frac{-x^2+4}{x^2+5x+6}$



Domain:

Vertical Asymptotes:

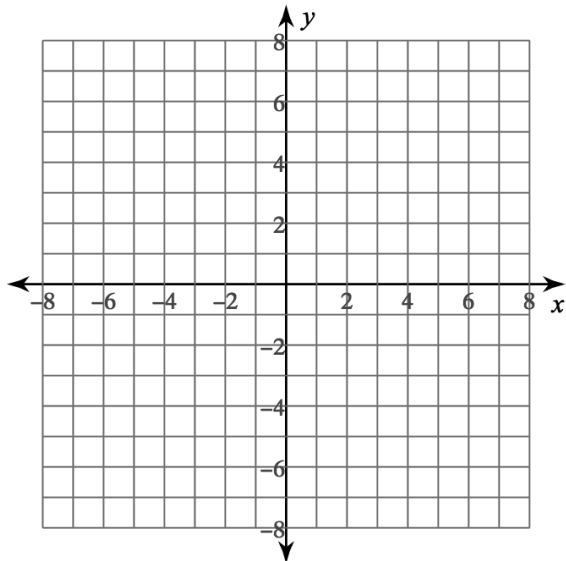
Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

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



Domain:

Vertical Asymptotes:

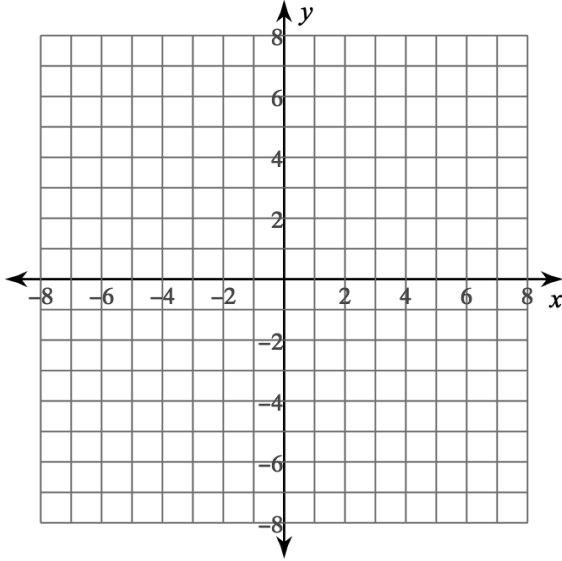
Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

5.  $f(x) = \frac{x-3}{4x+16}$



Domain:

Vertical Asymptotes:

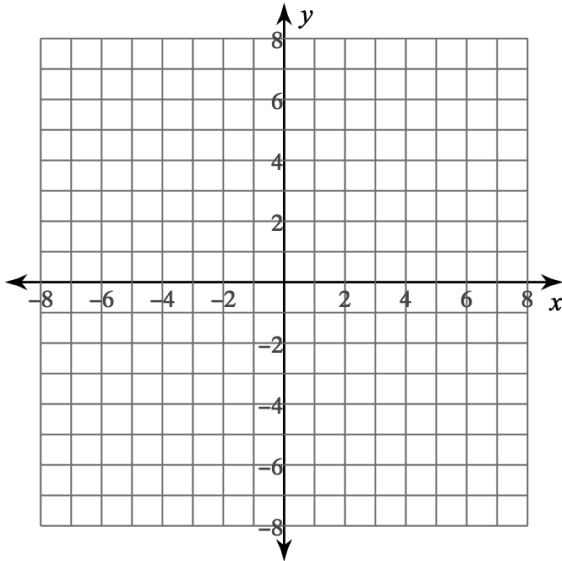
Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

6.  $f(x) = \frac{x-2}{x^2-9}$



Domain:

Vertical Asymptotes:

Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept: