

5.1 HW: Rational Graph Properties

Identify the requested information for each rational function.

1. $f(x) = \frac{-2x^2+32x}{x^2-9}$

Domain:

Vertical Asymptotes:

Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

2. $f(x) = \frac{2x^2+10x+8}{x^2+3x}$

Domain:

Vertical Asymptotes:

Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

3. $f(x) = \frac{x^3+2x^2-8x}{-4x^2-12x}$

Domain:

Vertical Asymptotes:

Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

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

Domain:

Vertical Asymptotes:

Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

5. $f(x) = \frac{x^2+4x+3}{2x^2-6x-8}$

Domain:

Vertical Asymptotes:

Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept:

6. $f(x) = \frac{2x+8}{x^2-x-6}$

Domain:

Vertical Asymptotes:

Holes:

Horizontal Asymptotes:

x-intercept(s):

y-intercept: