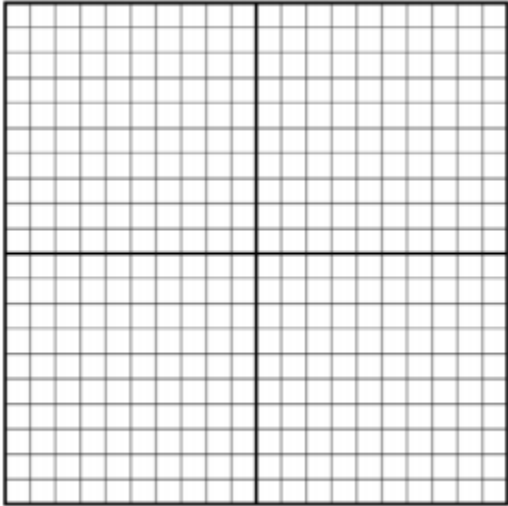


Graphing Rational Functions

Name: _____

1) How do you find the vertical asymptotes of a rational function from the equation?

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



Domain: _____

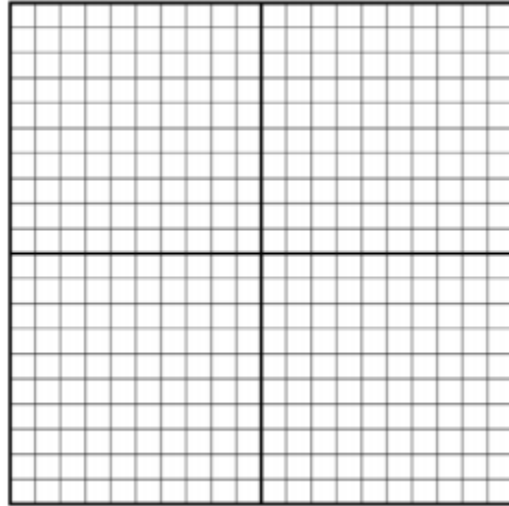
Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____

$$3) g(x) = \frac{x-5}{x^2-x-20}$$



Domain: _____

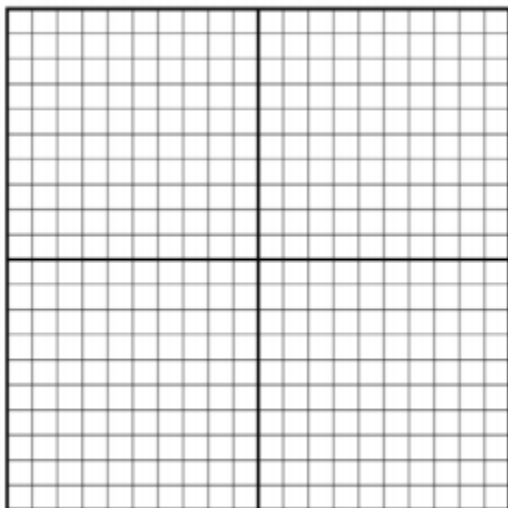
Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____

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



Domain: _____

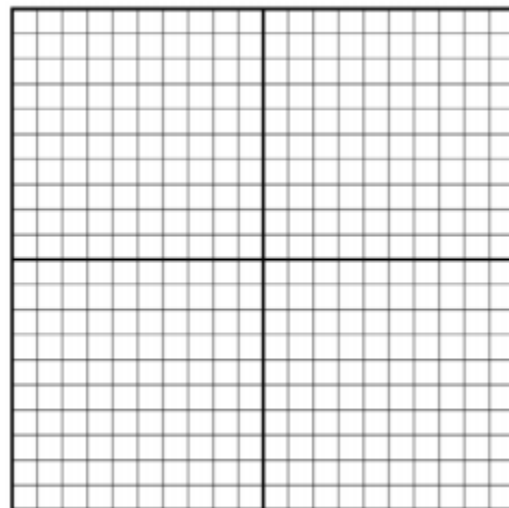
Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____

$$5) g(x) = \frac{x^3-8}{x-2}$$



Domain: _____

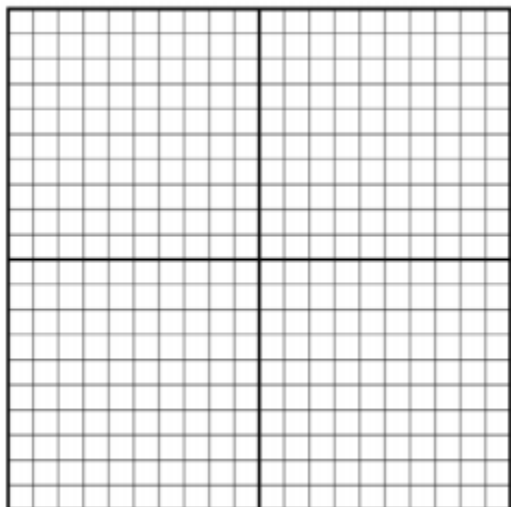
Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____

$$6) f(x) = \frac{3x^3 + 3x^2 - 10x - 10}{x+1}$$



Domain: _____

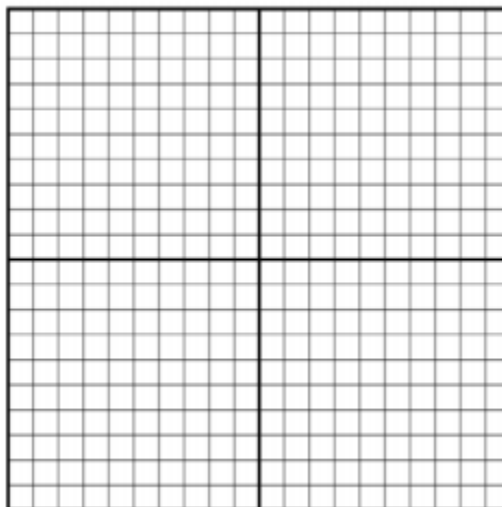
Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____

$$7) g(x) = \frac{2x^2 + 13x + 20}{x+4}$$



Domain: _____

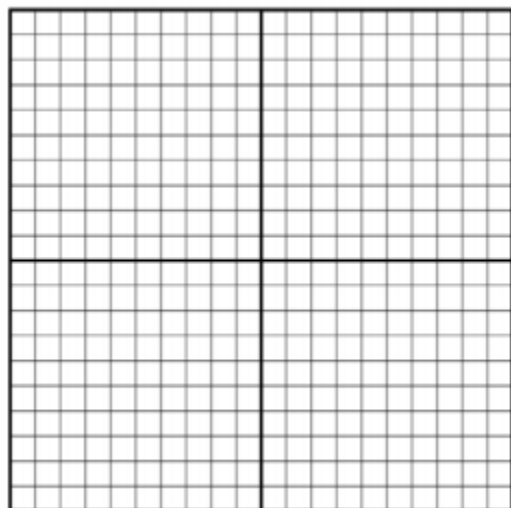
Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____

$$8) f(x) = \frac{x^2 + 7x + 12}{x^2 + 2x - 3}$$



Domain: _____

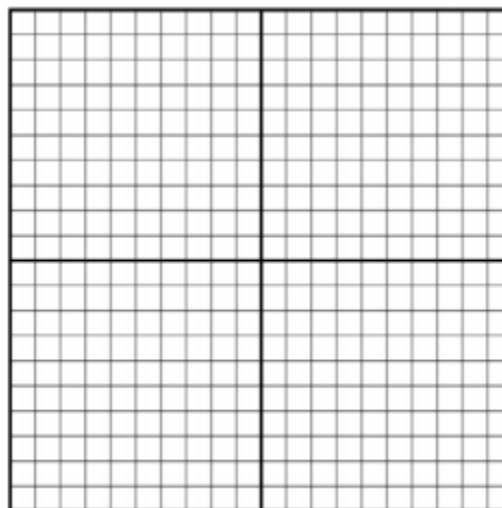
Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____

$$9) g(x) = \frac{2x^2 - 2}{x^2 - x}$$



Domain: _____

Range: _____

Vertical Asymptote(s): _____

Horizontal Asymptote: _____

Hole(s): _____