MORE PRACTICE – More Rational Functions

State the values of any vertical asymptotes, horizontal asymptotes, slant asymptotes and holes in the graph of the equation of the rational function.

1. $f(x) = \frac{3}{x^2+5x+6}$ VA: _____ HA: _____ SA: _____ Holes: _____

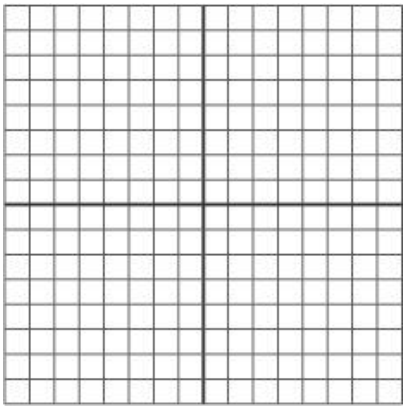
2. $f(x) = \frac{x-1}{x^2+3x-4}$ VA: _____ HA: _____ SA: _____ Holes: _____

3. $f(x) = \frac{4x^2}{x^2-3x-10}$ VA: _____ HA: _____ SA: _____ Holes: _____

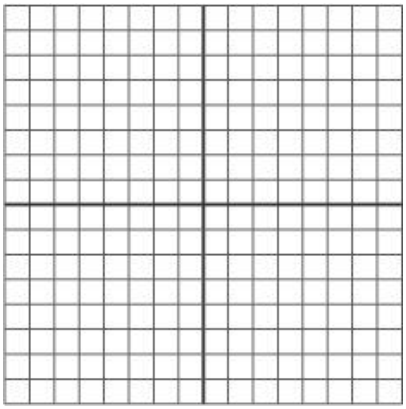
4. $f(x) = \frac{x^2+4x+3}{x-2}$ VA: _____ HA: _____ SA: _____ Holes: _____

Graph the following functions:

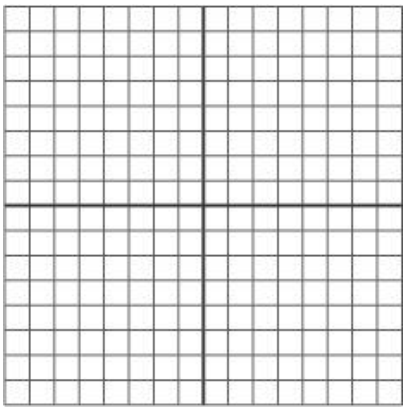
5. $f(x) = \frac{x-1}{x^2-6x+5}$



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



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



8. $f(x) = \frac{x^2+5}{x+1}$