

Functions F8 – Rational Functions

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

1. $f(x) = \frac{3}{x^2 - 25}$ VA: _____ HA: _____

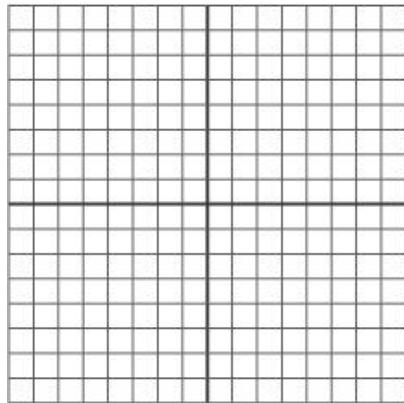
2. $f(x) = \frac{3x}{x-2}$ VA: _____ HA: _____

3. $f(x) = \frac{x^3 - 4}{x^2 - 2x - 8}$ VA: _____ HA: _____

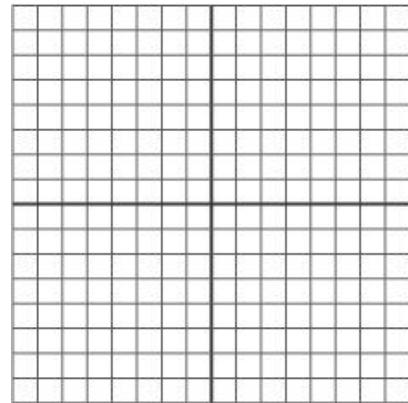
4. $f(x) = \frac{x^2 + 2x + 1}{x^2 + 6x + 5}$ VA: _____ HA: _____

Graph the following functions:

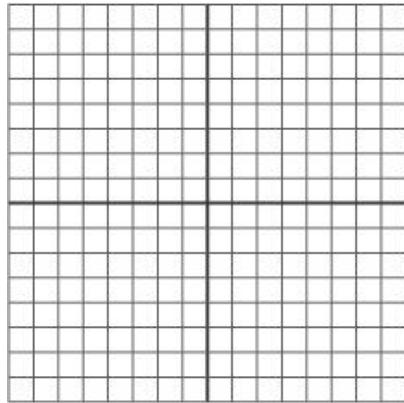
5. $f(x) = \frac{2x}{x-3}$



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



7. $f(x) = \frac{2}{x^2 - 16}$



8. $f(x) = \frac{2x}{x^2 - 16}$

