

Business PreCalculus MATH 1643 Section 004, Spring 2014
Homework 21

- 1-** Find the vertical asymptote(s) of $f(x) = \frac{x^2-6x+8}{x^2-x-12}$.
- 2-** Find the horizontal asymptote(s) of $f(x) = \frac{2x^2-3x+7}{3x^2-4x+11}$.
- 3-** Find the x -intercepts of $f(x) = \frac{(2x-1)(x+2)}{(2x+3)(3x-4)}$.
- 4-** Find a rational function $f(x) = \frac{N(x)}{D(x)}$ that has $f(\frac{1}{2}) = 0$, $f(x) \rightarrow 4$ as $x \rightarrow \pm\infty$, $f(x) \rightarrow \infty$ as $x \rightarrow 1^+$, and $f(x) \rightarrow \infty$ as $x \rightarrow 1^-$.