

Math 2143 - Brief Calculus with Applications

Quiz #8 - 2008.03.26

Name: _____

Consider the function:

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

1. What is the domain of $r(x)$?
2. Find all vertical asymptotes of $r(x)$.
3. Find all x -intercepts of $r(x)$.
4. Find the y -intercept of $r(x)$.
5. Find all horizontal or slant asymptotes of $r(x)$.