

Pre-Calculus

Determine the behavior of the function at the vertical asymptote(s) using a sign analysis.

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

2.  $f(x) = \frac{x-9}{x-7}$

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

4.  $f(x) = \frac{x-11}{2x+5}$

5.  $f(x) = \frac{x+3}{x^2-36}$

6.  $f(x) = \frac{x-9}{x^2-4}$

7.  $f(x) = \frac{x^2-25}{x-2}$

8.  $f(x) = \frac{x^2-49}{x+11}$

9.  $f(x) = \frac{x^2-9}{x^2-16}$

10.  $f(x) = \frac{x^2-25}{x^2-4}$

11.  $f(x) = \frac{x^2+8x}{x^2-2x-15}$

12.  $f(x) = \frac{x^2-5x}{x^2+4x-32}$