

Pre-Calculus

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

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

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

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

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

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

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

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

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

9.  $f(x) = \frac{4(x+1)}{x(x-4)}$

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

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

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