

Pre-Calculus

Determine the behavior of the function at the vertical asymptote(s) using a sign analysis. (2.7 Part 3)

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

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

3.  $f(x) = 4 - \frac{3}{x+7}$

4.  $f(x) = 3 + \frac{2x}{x-9}$

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

6.  $f(x) = -\frac{x}{x^2-49}$

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

8.  $f(x) = -\frac{1}{(x+4)^2}$

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

10.  $f(x) = -\frac{x^2-4}{(x+5)(x-1)}$