

Vertical Asymptotes and Domain of Rational Functions Date _____ Period _____

Identify the vertical asymptotes and domain of each.

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

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

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

4) $f(x) = \frac{4}{x-1} - 2$

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

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

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

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

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

10) $f(x) = -\frac{2}{x-1} - 1$

11) $f(x) = \frac{1}{x-4} + 2$

12) $f(x) = -\frac{4}{x} - 1$

13) $f(x) = \frac{x^2 - 16}{4x}$

14) $f(x) = \frac{x^3 + x^2 - 12x}{-3x^2 + 3x + 6}$