## **FUNCTION REVIEW WKST 4 – RATIONAL FUNCTIONS**

Graph of each of the following functions on graph paper. Be sure to find and label all asymptotes, x and y intercepts, and the range and domain of each of the following.

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

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

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

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

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

**6.** 
$$f(x) = \frac{4x^2}{3x^2 - 1}$$

7. 
$$f(x) = \frac{2x}{\sqrt{3x^2 + 1}}$$

**8.** 
$$f(x) = \frac{x^2 + 2x - 15}{x - 1}$$

9. 
$$f(x) = \frac{2x^2 - 11x + 12}{x - 4}$$