$$\lim_{x \to \pm\infty} f(x)$$

1. Find the positive horizontal asymptote(s) if they exist for each of the following:

$$\frac{x+2}{6x-4}$$

$$\frac{3x^2 - x - 2}{5x^2 + 4x + 1}$$

$$x^2 - x$$

$$\frac{\sqrt{2x^2 + 1}}{3x - 5}$$

$$\frac{x^2 + x}{3 - x}$$

$$\frac{x - 2}{x^2 + 1}$$

Check your answers by reading Examples 3, 10, 4, 11 & problem #17 from §2.6.