Math 250 Chapter 1 Definitions To Know P. Staley

(1-4) State the definitions

$$\lim_{x \to c} f(x) = L$$

- 2. f(x) is continuous at x = c.
- 3. The slope of the tangent line to y = f(x) at x = c.

$$\lim_{x \to c} f(x) = \infty$$

(5-7) Give the exact value of the limits:

5. 
$$\lim_{x \to 0} \frac{\sin(x)}{x} =$$
6. 
$$\lim_{x \to \pi/2} \frac{\sin(x)}{x} =$$
7. 
$$\lim_{x \to 0} \frac{1 - \cos(x)}{x} =$$