Reading Quiz 02 for Calculus A

Name:	Student ID $\#$:	Grade :	

Review section 5 and read section 6 of chapter 2, then do the following problems:

1. Definitions.

- (a) A function f is right-continuous at a point c in its domain if _____.
- (b) A function f is left-continuous at a point c in its domain if ______.
- (c) A function f is continuous at a point c in its domain if _____.
- 2. Write down those seven properties stated in Theorem 8, page 76.

3. If g is continuous at the point b and if $\lim_{x \to c} f(x) = b$, then $\lim_{x \to c} g(f(x)) =$ ______.

- 4. Use appropriate theorem to compute the following:
 - (a) $\lim_{x \to \infty} x \sin \frac{1}{x}$

(b) $\lim_{x \to 0^+} x \sin \frac{1}{x}$