## Reading Quiz 02 for Calculus A

Name: $\qquad$ Student ID \# : $\qquad$ Grade : $\qquad$
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 $\qquad$ .
(b) A function $f$ is left-continuous at a point $c$ in its domain if $\qquad$ .
(c) A function $f$ is continuous at a point $c$ in its domain if $\qquad$ .
2. Write down those seven properties stated in Theorem 8, page 76.
3. If $g$ is continuous at the point $b$ and if $\lim _{x \rightarrow c} f(x)=b$, then $\lim _{x \rightarrow c} g(f(x))=$ $\qquad$ .
4. Use appropriate theorem to compute the following:
(a) $\lim _{x \rightarrow \infty} x \sin \frac{1}{x}$
(b) $\lim _{x \rightarrow 0^{+}} x \sin \frac{1}{x}$
