

MA 125-06 §2.2 – 2.3	Quiz #2	score	Name: _____ 8 September 2000
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1. Let $f(x) = (1 + x)^{(2/x)}$. Estimate the value of $\lim_{x \rightarrow 0} f(x)$ by checking values of $f(x)$ using x -values close to, and on both sides of, the limit point. Try to ensure that your estimate is correct to 3 decimal places. (7 points)

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2. Let $f(x) = \llbracket x \rrbracket - x + 1$. Determine if $\lim_{x \rightarrow 2} f(x)$ exists by checking the left- and right-handed limits there. Explain. (7 points)

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3. Evaluate the following limit if it exists. Show all the details in your calculation. (7 points)

$$\lim_{x \rightarrow 2} \frac{2 - x}{\sqrt{x} - \sqrt{2}}$$