

9/17/2001
Dr. Lunsford

MA303 Calculus I
Quiz 5

Name: _____
(20 Points Total)

I. Quick Limits. Find the indicated limits. Clearly indicate your answers. You are not required to show any work on these problems. (2 points each – 10 total)

(a) $\lim_{x \rightarrow 2^-} \frac{x+1}{x-2}$

(b) $\lim_{x \rightarrow \infty} \frac{2-4x-3x^2}{4x^2+11x+7}$

(c) $\lim_{x \rightarrow -\infty} \frac{3-x}{x^2+1}$

(d) $\lim_{x \rightarrow -\infty} (7x^2 - 11x^4 + 14x + 21)$

(e) $\lim_{x \rightarrow -\infty} \frac{x^4 + 7x + 8}{x^3 - 3x + 12}$

II. Find the indicated limits. If a limit does not exist indicate so by writing DNE for your answer. You must show some work to justify your answer. Clearly indicate your answers. (4 each)

(a) $\lim_{\theta \rightarrow \frac{\pi}{2}^+} \frac{\theta - \pi}{\cos \theta}$

(b) $\lim_{t \rightarrow -\infty} \frac{-3t}{\sqrt{t^2 + t + 5}}$