9/10/2001 MA303 Calculus I Name:_____
Dr. Lunsford Quiz 3 (20 Points Total)

I. Find the indicated limits. If a limit does not exist indicate so by writing DNE for your answer. Clearly indicate your answers. (2 each – 4 total)

(a) $\lim_{z\to -2} \frac{2z^3 - z}{1 - 3z^2}$

(b) $\lim_{x\to \pi} \frac{\cos x}{x}$

II. Find the indicated limits. If a limit does not exist indicate so by writing DNE for your answer. You must show at least one intermediate step on each problem. Clearly indicate your answers. (4 each – 16 total)

(a) $\lim_{x\to 3} \sqrt{x^2 + 3x - 2}$

(You must explicitly show your substitution on this problem)

(b) $\lim_{x\to 3} \frac{\sqrt{x+1} - 2}{x - 3}$

(c) $\lim_{w\to 2} \frac{2 - w}{w^2 + 2w - 8}$

(d) $\lim_{\theta\to 0} \frac{\cos\theta \tan\theta}{\theta}$