2/5/2003	MA423 Numerical Analysis	Name:
Dr. Lunsford	Quiz 3	(20 Points Total)

Neatly show ALL of your work and CLEARLY indicate your answers. Use the back of the page if necessary.

I. Use $p = \frac{(1211 - 1192)}{.3275}$ to answer the following questions (16 points total)

(a) Compute p using three digit rounding arithmetic. (4 points)

(b) Compute p using three digit chopping arithmetic. (4 points)

(c) Complete the error chart below. Use your calculator approximation of p as the exact value of p. (6 points)

	Three Digit Rounding	Three Digit Chopping
Absolute Error		
Relative Error		

(d) To how many significant digits does the three digit chopping approximation of p approximate p? (2 points)

II. Find the rate of convergence of the sequence $\left\{\frac{e^{1/n}-1}{1/n}\right\}_{n=1}^{\infty}$ to its limit 1 as $n \to \infty$. (4 points)