

Section 004 of Calculus Lab 2,
Quiz of February 7, 2003
10:00-10:15 a.m.

Name (clearly printed): _____

ID #: _____

1. Carefully print MATHEMATICA input commands whose evaluation yields a graph of

$$x^3 + y^3 - 8xy = 0.$$

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2. Carefully print MATHEMATICA Input statements based on Newton's Method as explained in pages 83–85 of our textbook to numerically approximate the solution of

$$e^{-x} = \ln x$$

based on $x = 1.5$ as the initial guess. (Do not use the preferable **FindRoot** procedure.)

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3. Carefully print MATHEMATICA Input for the expression

$$expr = \frac{2u^4 + 3u^3v}{1 + u^2v^2 + 4v^4}$$

and then carefully print MATHEMATICA Input whose evaluation will replace u in $expr$ with s^2t^4 and replace v in $expr$ with s^4t^2 .

(End of Quiz)