

Section 003 of Calculus Lab 2,
Quiz of February 4, 2003
10:00-10:15 a.m.

Name (clearly printed): _____

ID #: _____

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

$$\frac{x^2}{16} + \frac{y^2}{9} = 1.$$

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

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

based on $x = .5$ as the initial guess. (Do not use the preferable **FindRoot** procedure.)

3. Carefully print MATHEMATICA Input for the expression

$$expr = a^5 + 3a^2b^3 + 5a^3b^2 + b^5$$

and then carefully print MATHEMATICA Input whose evaluation will replace a in $expr$ with x^2y^3 and replace b in $expr$ with x^4y .

(End of Quiz)