

142 PLACEMENT TEST; JANUARY 28, 2003

NAME:

SUNY ID N.:

There are two problems

1) Find the volume of the solid generated by revolving about the x -axis the region bounded by the line and curve below:

$$y = \sqrt{9 - x^2}, \quad y = 0.$$

2) Find the length of the curve

$$x = e^t - t, \quad y = 4e^{t/2}, \quad 0 \leq t \leq 3.$$