

Quiz 2

MATH 112-017 and 112-019

New Jersey Inst. Tech.

Prof. Nicholas Dubicki

Time Limit: 15 min.

Name: _____

Date: _____

Section: _____

1. The region between the following curves: $y = 0$, $y = e^x$, $x = 0$, and $x = 1$ is revolved around the x -axis. Set up the integral which represents the volume of the resultant solid. Solve the integral.

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2. Use the arclength integral to express the circumference of a circle centered at the origin of radius r . (You need not solve the integral). HINT: the equation for a circle is not necessarily a strict function.

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