

MATH 102

QUIZ 3A

Name:

ST ID

section:

1. Use the method of the cylindrical shells to find the volume generated by rotating the region bounded by the given curves

$$y = \cos\left(\frac{\pi x}{2}\right), \quad y = 0, \quad 0 \leq x \leq 1, \quad \text{about the } y\text{-axis}$$

2. Evaluate the integral

$$\int \frac{x^2}{\sqrt{6x - x^2}} dx$$