Group Exam 3

Name: _____

Math 142

Name of group member: _____

Professor Johnson

Name of group member: _____

Problem 1: Evaluate the integral.

$$\int \frac{1}{x^4\sqrt{x^2-1}}\,dx$$

Signature line: _____ _____

Group Exam 3 Name: _____

Math 142 Name of group member: _____

Professor Johnson Name of group member: _____

Problem 2: Evaluate the integral. Evaluate all trig expressions in your final answer.

$$\int_0^{\pi/6} \sec^3(x)\, dx$$

Signature line: _____ _____

Group Exam 3

Name: _____

Math 142

Name of group member: _____

Professor Johnson

Name of group member: _____

Problem 3: Suppose the region bounded by the curves $y = \cos(\frac{x}{4})$, $2\pi \leq x \leq 6\pi$, and $y = 0$ is rotated about the y-axis. Find the volume of the resulting solid. Evaluate all trig expressions in your final answer.

Signature line: _____ _____