

King Fahd University of Petroleum & Minerals  
Department of Mathematical Sciences  
Math 102-09, Quiz # 3, Semester 132

<b>10</b>

Name:

Student ID:

SR:

Q1) The base of a solid is bounded by the curves  $y = x^3$ ,  $y = 0$ , and  $x = 1$ . The cross-sections of the solid perpendicular to the  $x$  -axis are squares. Find the volume of the solid.

Q2) Find the volume of the solid generated by revolving the region bounded by  $y = \sqrt{x}$ ,  $y = 2$ ,  $x = 0$  about the  $x$  -axis.