

Math 232 Spring 2004  
Quiz 12 (4/29)

Name: \_\_\_\_\_

*This quiz is worth 10 points and you have 10 minutes to complete it. Show all work and circle your final answers.*

**Calculators ARE allowed today.**

**1.** (10 pts) Consider the solid of revolution obtained by rotating the region between the graph of  $f(x) = \sqrt{x}$  and the  $x$ -axis from  $x = 0$  to  $x = 4$  around the  $x$ -axis. Approximate the volume of this solid of revolution using four discs.

***NOTE: YOU ARE NOT GOING TO DO AN INTEGRAL HERE. YOU ARE GOING TO FIND THE VOLUMES OF FOUR DISCS AND ADD THEM UP.***

*(Some large, clear pictures might earn you partial credit. In any case, show your work as clearly as humanly possible so I can easily see how you arrived at your answer.)*