

**WRITE YOUR NAME:**

MAC 2312 Homework 4

Due in class, Friday February 24th

You can use more paper if necessary, but please STAPLE

**Question 1.** Find the volume of the solid that results when the region enclosed by  $y = x^2$  and  $y = x^3$  is revolved around the line  $y = -1$ .

**Question 2.** Let  $A$  be the region that is enclosed by  $y = 1/x^3$ ,  $x = 1$ ,  $x = 2$ , and  $y = 0$ . Find the volume of the solid that is generated when the region  $A$  is revolved around the line  $x = -1$ .