

**Last name:** \_\_\_\_\_

**First name:** \_\_\_\_\_

**Section:** \_\_\_\_\_

Question:	1	2	Total
Points:	10	10	20
Score:			

**Instructions:** You must answer all the questions below and give your solutions to the TA at the end of the recitation. Write your solutions on a different sheet of paper. No late worksheet will be accepted.

\_\_\_\_\_ **QUESTION 1** \_\_\_\_\_ **(10 pts)**

Describe the solid that the following integral represents

$$\pi \int_{-1}^1 (1 - y^2)^2 dy.$$

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QUESTION 2

(10 pts)

Compute the volume of the solid obtained by rotating about the  $x$ -axis the region bounded by  $y = 6 - x^2$  and  $y = 2$ .