

MAT 17B, Fall 2020
Homework 4

Due before 4:10 PM on Wednesday, November 4

Please write the homework solutions in connected sentences and explain your work. Mark the answers to each question. Scan or take pictures of your homework and upload it to Gradescope before due time.

1. (10 points) Find the area of the region bounded by the curves $y = x^2 - 2x$ and $y = x + 4$.
2. (10 points) Find the volume of the solid obtained by rotating the region bounded by curves $y = x^2 - 2x$ and $y = x + 4$ about the x -axis.
3. (10 points) Find the volume of the solid obtained by rotating the region bounded by curves $y = e^x$, $x = 1$, $x = 3$ and $y = 0$ about the x -axis.