

**Homework Set 5**

DUE: MARCH 4, 2019 (AT THE BEGINNING OF CLASS)

**To be handed in***Please write your solution to Problem 1 on a single sheet of paper!*

1. Set up (but no need to evaluate!) the integral that computes the volume of the solid obtained by revolving the region bounded by the parabola  $y = -\frac{x^2}{16}$  and the line  $y = -1$  about the following lines:
  - a)  $y = -1$
  - b)  $y = -2$
  - c)  $y = 1$
  - d)  $x = 5$
  - e)  $x = -6$
  
2. Textbook (5th edition) Section 7.2, Exercises 9, 10, 19-22, 31, 32
  
3. Textbook (5th edition) Section 7.3, Exercises 1-8, 15-20, 47, 48, 57