

Fall 2004 Calculus I, sections 4, 5, 6, Courant Institute of Mathematical Sciences, NYU.

Homework 10, due November 22

Self check (not to hand in, answers are in the back of the book):

Section 6.1: 15.

Section 6.2: 27, 37, 41.

Section 6.3: 1, 17.

To hand in:

Section 6.1: 16, 32.

Section 6.2: 28, 38, 42.

Section 6.3: 2, 18.

More problems (to hand in)

1. I have a large urn shaped like a parabola. The urn is one meter tall. The diameter at the top is half a meter.
 - a. How many liters of water does the urn hold? One liter is 1000cm^3 .
 - b. What is the level of the water surface when it contains 50 liters of water?