Homework Set 6

Due: Nov 5, 2018 (at the beginning of class)

To be handed in

Please write your solutions to Problem 1 a)-d) on only 1 sheet of paper.

- 1. All edges of a 3-dimensional cube are expanding at a rate of 6 cm/s.
 - a) How fast is its volume changing when each edge is 2 cm long?
 - b) How fast is its volume changing when each edge is 10 cm long?
 - c) How fast is its surface area changing when each edge is 2 cm long?
 - d) How fast is its surface area changing when each edge is 10 cm long?
- 2. Textbook (5th edition) Section 3.7, Exercises 13, 16, 22, 23, 24, 25, 29, 31, 33, 46