Math 122B-020, Fall 2014 Homework 2. Due **Monday** 10/6/14 in class.

- **Please show all work neatly on your own paper. Do not show me 'scratch' work - your solutions should be logical and easy to follow, with your answer clearly marked if needed. Avoid unnecessary arrows, scribbles, boxes, or otherwise chaotic behavior.**
- Problems marked with a star have hints at the end.
- A 'valid' interpretation is a complete, logical sentence which includes values and units. Example:

  Suppose $V(t)$ gives the volume of a gas (in cubic feet) at time t (in seconds).
  Interpret $V'(1) = 2$.

  - **Invalid:** The derivative of V is 2.
  - **Invalid:** $\frac{dV}{dt} = 2$
  - **Invalid:** The volume is increasing.
  - **Invalid:** When $t = 1$, the volume is increasing at a rate of 2.
  - **Valid:** When $t = 1$ second, the volume of the gas is increasing at a rate of 2 cubic feet per second.

- **Note: Quiz 2 on Thursday 10/2 will cover 2.5, 2.6 and 3.1. Exam I will cover 2.1-3.3!**

1. Book problems

- Section 2.5 6,22,26,32,36
- Section 2.6 6,7,8,14,20
- Section 3.1 56,64,66,72,76
- Section 3.2 38,40,44,46,52
- Section 3.3 46, 52, 57, 58, 70