1 Assignments

All numbers below refer to the textbook:
Calculus Concepts and Contexts, J. Stewart, 4th Ed.

- §9.1: 4, 9, 10, 11, 16, 25, 28, 32, 35,

- §9.2: 4, 8, 10, 12, 14, 17, 18, 20, 21, 22, 25, 26, 28,

- §9.3: 1(b,c,e,f), 2, 7, 8, 10, 16, 17, 21(c,d), 22(b,c), 23, 25, 31, 32, 33, 41, 49,

- §9.4: 1(b,d,c,f), 6, 10, 13, 15, 18, 19, 22, 23, 28, 30, 32, 35,

- §9.5: 1(b,d,e,g,h,i,j,k), 3, 4, 5, 11, 12, 21, 24, 25, 26, 27, 32, 39, 40, 42, 59

- Extra credit §9.3-50, §9.4-36, §9.5-63.

Boldfaced problems weigh 1 point each and all other problems 0.5 points each. Any two sub-problems of a problem sum up to 0.5 points. A random subset of the assigned problems with a total of 25 points will be graded.

2 Directions

For all types of problems, you need to identify relevant definitions or theorems. For simple problems such as true/false questions, you do not have to mention definitions and theorems in your solution; however, you need to justify each step of moving towards the solution for complicated problems such as §9.5-32.

Starting from this week, the materials of a next week depends heavily on those of previous weeks, so make sure that you are proficient of basic operations such as dot product and cross product. The rewards of working hard on prerequisites include the ease of learning new knowledge. In the analogy of multiple-level building, the height of a building is proportional to the solidness of lower levels.

**Extra credits**: Additional 15% credits will be given to you if you typeset your solutions in \texttt{LATEX}. You can also get partial extra credit for typeset solutions of some problems. You will also get extra credit if you find typos or errors in the summary handouts.

**Caution**: please make sure that your handwriting is recognizable, otherwise you only get partial credit for the recognizable part.