

Things to do by Next Week

It would be a very good idea to spend large amounts of time studying for the test on next Tuesday. It will cover most of what we have done to date and so there is a good deal to review. As practice you should look at the following:

1. The work sheets that have been handed out in class. This includes the first one that had the jogger and pizza problems. There will be problems that look very much like the ones on the work sheets.
2. In the text the following are good practice problems: Page 44 numbers 15, 16, 17, 18, 19a,b,c,d.
3. There will also be questions on rate equations such as the S-I-R model or the equation $P' = kP$ for population growth. For S-I-R look at pages 24–25 problems 20 and 21. For population growth look at page 48 problem 24.

The Group Project

This is due next Thursday. The groups will be no larger than 4 persons and preferable of size 4 exactly and the group will submit one paper with all four names on it.

You are to pretend your group is a consulting firm (find a clever name for the company) hired by an apple grower to figure out what is the best number of trees to plant in his orchard. Like most people buying a service he wants to be sure that he is getting what he pays for. So your answer must come with an explanation he can follow. (And in real life your grade will depend on your explanation.) Here are some remarks on the individual problems.

PROBLEM 1. The idea of replacing the graph of a function that is not known exactly by a piecewise linear function is a very common idea in engineering.

PROBLEM 2. Note that part of the problem is to describe the graph in words.

PROBLEM 3. Note that you are given the answer to this problem. Thus explaining how you got the answer is the important thing.