This homework is not intended to develop a new basic skill. Instead, you will use three ideas from previous lessons to explore some deeper or more difficult problems. The three ideas are:

1. Secant slope. Also known as average rate of change (and sometimes average velocity.)
2. Limits. Particularly as they apply to secant slope formulas.
3. The idea that math is most useful when you work with letters instead of numbers.

Things you will do with these ideas:

- Apply limits to secant slope formulas. This will let you compute *exact* tangent slopes. (Also known as derivatives.)
  
The first homework problem provides an outline for how to do this.

- After you practice computing exact derivatives at numerical locations, you will upgrade to a symbolic (letter) location.

- Finally, your ability to compute derivatives at symbolic locations will let you solve some fairly advanced homework problems.