

Today: Worksheet 2

Office Hours: today 3-4 & tomorrow 1:30-2:30 in PDL C-326
(TA's office hrs posted on class webpage)

Homework 1: Worksheets 1 and 2 → collected FRIDAY in lecture

Recall from Monday:

- In Math 111 we studied AVERAGE rates of change, which we can
 - measure as slopes of **SECANT LINES** through **TWO** points on the graph, and
 - compute as fractions (e.g. $\frac{\Delta d}{\Delta t}$)
- Calculus is about computing INSTANTANEOUS rates of change.
 - These are measured as slopes of **TANGENT** lines to the graph at **A POINT**.
 - Since we don't have two known points on the tangent but only one, we cannot compute the instant rate as a fraction involving the given function, but we need to develop special methods.

For now, we will be approximating the instantaneous rates by average rates over small intervals (the smaller the interval, the better the approximation)

