

## Recitation #2 - 2.1: The Idea of Limits (Teaching Guide)

Here is a suggested structure for this recitation

### Warm up:

- *5 minutes*: Let students think about the question and then bring together for a whole class discussion. Discuss the differences between a secant and tangent line. For a non-linear function, are they the same line?

### Problem 1:

- *10 minutes*: Give students a minute to think about #1 parts (a), (b), and (c), and then discuss as a whole class.
- *15 minutes*: Let students work in groups on #1d. Then, discuss #1d as a class.
- *10 minutes*: Let students work in groups on #1e and #1f. Then, discuss these problems as a class.

### Problem 2:

- *15 minutes*: Let students work in groups on #2. Then, discuss this problem as a class. If there is time, these would be good problems to have students come to the board and present the solutions. Emphasize that our answer of  $\pi$  is an approximation. The real answer is still unknown and isn't necessarily a nice whole number.