

# MATH 150

## Today

1. 1.1-1.2: Limits

### Goals:

1. Limits (Understand the definition and computation of basic limits)

## Where is today's material used?

1. Limits are the foundation of calculus.

## Chapter 1: Limits and Continuity

1. Average rate of change over smaller and smaller intervals
2. Limits (ordinary, limits at infinity, infinite limits, one-sided limits)
3. Vertical and horizontal asymptotes
4. Formal definition of limit (including graphical interpretation)
5. **Theorem**: for a limit to exist, the left- and right-hand limits must exist and be equal.
6. Examples. p. 102: 21, 22-25, 31-34, 35-38
7. Examples: p. 113: 19, 20-24, 48, 55, 57, 59

## Next Time

1. Watch Section 1.4 [38 min]