MATH 150

Today

1. 1.5: Calculating Limits

Goals:

1. Limit Laws (understand how to apply basic limit laws to compute limits)

Where is today's material used?

1. We will use limits to understand rates of change.

Chapter 1: Limits and Continuity

1. Limit laws: constant multiple rule, sum/difference rule, product/quotient rule, composition rule
2. Implications of limit laws on continuity
3. **Theorem:** Limits can be calculated by first using algebraic simplification.
4. **Squeeze Theorem/Sandwich Theorem**: If $f(x) \leq g(x) \leq h(x)$ for x near a (except possibly at a) and $\lim_{x \to a} f(x) = \lim_{x \to a} h(x) = L$, then $\lim_{x \to a} g(x) = L$.
5. Examples. p. 145: 25-56

Next Time

1. Watch Section 1.6 [21 min]