MATH 150

Today

1. 1.6: Infinite Limits
2. Homefun

Goals:

1. Infinite limits (understand how a limit can be infinite)
2. Limits at infinity (understand how to find $\lim_{x \to \pm\infty} f(x)$)
3. Indeterminate forms (be able to identify indeterminate forms)

Where is today's material used?

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

Chapter 1: Limits and Continuity

1. Infinite limits
2. Limits at infinity
3. Indeterminate forms: $\frac{0}{0}, \frac{\infty}{\infty}, 0 \cdot \infty, \infty - \infty, 0^0, 1^\infty, \infty^0$.
4. **Theorem:** (The Squeeze Theorem) A function lying between two other functions that share the same limit also has that limit.
5. Examples: p. 157: 24, 25-52

Next Time

1. Review for Exam I