

# Limits “Boot Camp” for Calculus

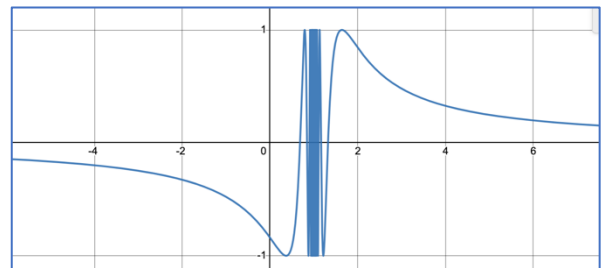
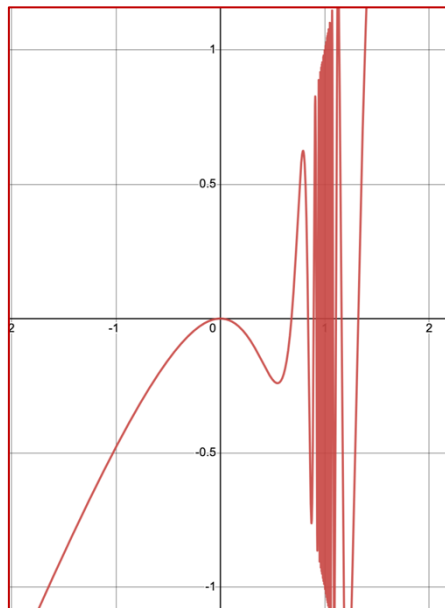
- What is a limit?
- One-sided limits
- Properties of limits
- Calculating limits
- **Squeeze Theorem**
- Infinite Limits
- Limits at Infinity
- Continuity
- Important limits

## Simple substitution

$$\lim_{x \rightarrow 0} \sin x =$$

Now, consider:

$$\lim_{x \rightarrow 0} \left( x^2 \sin \left( \frac{1}{x-1} \right) \right) =$$



$$\lim_{x \rightarrow 0} \left( x^2 \sin \left( \frac{1}{x-1} \right) \right) = ?$$

$$\lim_{x \rightarrow 0} \left( 3 + x^4 \cos \left( \frac{5}{x} \right) \right) = \quad ?$$

$$\lim_{x \rightarrow 0} \left( x^2 e^{\sin \frac{1}{x}} \right) =$$