

Your Name:

Duration of the Quiz is 20 minutes. There are four problems, worth 20 points. Show all your work for full credit. Books, notes etc. are prohibited. Calculators are NOT permitted.

1. Evaluate the limit.

$$\lim_{x \rightarrow 1} (x - 3)(x - 5)$$

2. Evaluate the limit.

$$\lim_{x \rightarrow 2} \frac{x^2 - 4}{x - 2}$$

3. Evaluate the limit.

$$\lim_{x \rightarrow 1} \frac{(x-1)(x+2)}{\sqrt{x+3}-2}$$

4. Use the Squeeze Theorem to show that

$$\lim_{x \rightarrow 0} x^6 \cos\left(\frac{4}{x}\right) = 0$$