

BC Calculus

Formal Definition of a Limit – Practice Problems for class

Prove each of the following using the formal (delta-epsilon) definition.

1. $\lim_{x \rightarrow 3} 8 - 5x = -7$

2. $\lim_{x \rightarrow 2} \frac{x+1}{2x-3} = 3$

3. $\lim_{x \rightarrow -\infty} \frac{3x+1}{2x-4} = \frac{3}{2}$