
Limits and Continuity Starter Pack

1. $\lim_{x \rightarrow 4} \frac{x^2 - 16}{x - 4}$

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

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

4. Find a such that $f(x) = \begin{cases} 2x - 3x^2 & x \geq 1 \\ ax + 5 & x < 1 \end{cases}$ is continuous at $x = 1$.