

1. Find the limit or explain why it does not exist: $\lim_{x \rightarrow -1} \frac{1}{x^2 + 1}$.

2. Find the limit or explain why it does not exist: $\lim_{x \rightarrow 2} \frac{x^2 - x - 2}{x^2 - 4}$.

3. Find the limit or explain why it does not exist: $\lim_{\theta \rightarrow 0} \frac{\theta}{\cos \theta}$.