

- Attempt to evaluate the following limits with substitution and logic
- If the result of substitution is indeterminate, label it indeterminate, then evaluate it numerically

1.  $\lim_{x \rightarrow \infty} \frac{1}{\sqrt{x+1}} \cdot x$

2.  $\lim_{x \rightarrow 0} \frac{2x+3}{x^2}$

3.  $\lim_{x \rightarrow \infty} \frac{\cos x}{x^2}$

4.  $\lim_{x \rightarrow 0} \frac{\frac{3}{x}}{(e^x - 1)^2}$

5.  $\lim_{x \rightarrow 0} \frac{\frac{8}{x^2}}{\frac{x}{4} - \frac{2}{x^2}}$