

Keeper 4.10 Virtual Problems

Examples: Evaluate the following limits.

1. $\lim_{x \rightarrow 0} \frac{x + \tan x}{\sin 6x}$

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

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

4. $\lim_{x \rightarrow 0} \frac{\tan x - x}{x^3}$

5. $\lim_{x \rightarrow 0} \frac{\sin(3x)}{ex}$

6. $\lim_{x \rightarrow \infty} \frac{\ln x}{\sqrt{x}}$

7. $\lim_{x \rightarrow \pi} \frac{\sin(5x)}{x + \pi \cos(3x)}$

8. $\lim_{x \rightarrow 64} \frac{\sqrt[3]{x} - 4}{x - 64}$