

SECTION 4.7

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

4.7.3 Evaluate $\lim_{x \rightarrow \frac{\pi}{2}^-} (\sec x - \tan x)$.

4.7.5 Evaluate $\lim_{x \rightarrow 0} \frac{1}{x^2} - \frac{1}{x}$.

4.7.7 Evaluate $\lim_{x \rightarrow 0^+} \sin x \ln x$.

4.7.9 Evaluate $\lim_{x \rightarrow 0^+} x \ln \sin x$.

4.7.11 Evaluate $\lim_{x \rightarrow \frac{\pi}{2}^+} (\tan x)^{\cos x}$.

4.7.13 Evaluate $\lim_{x \rightarrow 0^+} (\sin x)^x$.

4.7.15 Evaluate $\lim_{x \rightarrow 0} (\sin 2x + 1)^{1/x}$.

4.7.17 Evaluate $\lim_{x \rightarrow 0} (\cosh x)^{4/x}$.

4.7.2 Evaluate $\lim_{x \rightarrow +\infty} \frac{e^x}{x^3}$.

4.7.4 Evaluate $\lim_{x \rightarrow 0} \left(\csc x - \frac{1}{x} \right)$.

4.7.6 Evaluate $\lim_{x \rightarrow 1^-} (x - 1) \tan \frac{\pi x}{2}$.

4.7.8 Evaluate $\lim_{x \rightarrow 0^+} x \ln x$.

4.7.10 Evaluate $\lim_{x \rightarrow +\infty} (x + e^x)^{2/x}$.

4.7.12 Evaluate $\lim_{x \rightarrow +\infty} \left(1 + \frac{1}{x^2} \right)^{x^2}$.

4.7.14 Evaluate $\lim_{x \rightarrow 0} (\cos 3x)^{1/x}$.

4.7.16 Evaluate $\lim_{x \rightarrow +\infty} (2e^x + x^2)^{3/x}$.

4.7.18 Evaluate $\lim_{x \rightarrow 0} (e^x + 3x)^{1/x}$.