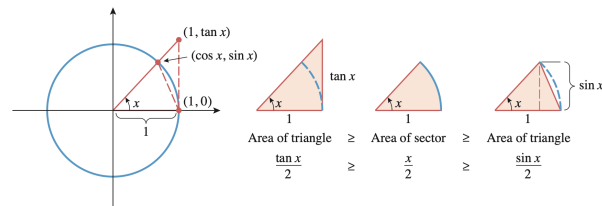# Derivative Review Worksheet

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August 28, 2025

1 Exercises

I. Use the limit definition of the derivative to find $\frac{d}{dx}\frac{1}{x}$.

II. Use the figure below and the squeeze theorem to show that $\lim_{x\to 0}\frac{\sin(x)}{x}=1$.

III. Use implicit differentiation to determine the derivative of $\arcsin(x)$.