

Quiz 01

Math 140-002: Calculus I (Spring 2026)

Week 1 (Jan 12–Jan 16, 2026)

Relevant topics: Functions, inverse functions, trigonometric review, exponential and logarithmic expressions

Time: 10–20 minutes.

Instructions: No notes. Show essential steps. Focus on definitions and computational fluency.

1. Given $\tan(x) = \frac{3}{4}$ with x in Quadrant I, find $\sec(x)$.
2. Evaluate exactly: $\cos(\arcsin(2/3))$.
3. Simplify using log rules: $\ln(x^2e^3)$ (assume $x > 0$).
4. Solve for x : $3^{2x-1} = 81$.