

Calculus 12 Unit 1 (LG 1-4) Test Prep

Test out of 42.

10 multiple choice questions

13 written questions

TOPICS

LG 1 (Chapter 1)

- Find the domain of a function given the equation.
- Determine the composition of a function
- Given an expression for $f(x)$, find $f(-3)$ etc.
- Sketch the graph of a piecewise function.
- Find the equation of a line given some info about it (ex. A point and the slope, two points, a line that is perpendicular and a point)

LG 2/3 (Chapter 2)

- Given a graph, determine some limits.
- Find the limit of functions (polynomial, rational, piecewise, trig)
- Determine where vertical and/or horizontal asymptotes exist.
- Determine where places of discontinuity exist.
- Prove that a function is not continuous at a point. Prove that a function is continuous at a point.
- Continuity from the left/right.
- Removable/non-removable discontinuity.
- Trig identities.

$$\sin^2 x + \cos^2 x = 1$$

$$\sin^2 x = 1 - \cos^2 x$$

$$\cos^2 x = 1 - \sin^2 x$$

$$\lim_{x \rightarrow 0} \frac{\sin x}{x} = 1$$

$$\lim_{x \rightarrow 0} \frac{x}{\sin x} = 1$$

$$\lim_{x \rightarrow 0} \frac{1 - \cos x}{x} = 0$$