

CALCULUS 12 LG 9

UNIT 2 TEST



EVALUATION:

This is the Unit 2 test which will be on the expectations from LG 5-8.

The test is out of 44.

There are 15 multiple choice questions and 7 written questions.

TOPICS YOU SHOULD KNOW:

Multiple Choice

- Find the average rate of change (slope of a secant line).
- Find the second derivative.
- Derivatives of trig functions.
- Chain Rule.
- Find the equation of a tangent line.
- Find the inverse of a function.
- Logarithm rules.
- Solve word problems involving exponential equations.
- Implicit differentiation.
- Log & exponential derivatives.
- Find exact value of inverse trig functions.
- Derivatives of inverse trig functions (these will be on your formula sheet).

Written

- Given a function, find the average rate of change on an interval and the instantaneous rate of change at a point.
- Use the definition of a derivative to calculate the slope of a given function.
- Use the chain rule to calculate the derivative.
- Use implicit differentiation to determine the equation of both the tangent and normal (perpendicular) lines.
- Logarithmic differentiation.
- Inverse trig differentiation.
- Related rates problems.

To prepare for the unit test, you could do one or all of the following:

- Re-watch the instructional videos.
- Review your notes and journal entries.
- Re-do some questions from the learning guides on the above topics.

- Complete the supplementary exercises from Chapter 3 on pages 219-220 #2, 4-8, 10-14, 18-20.
- Complete the supplementary exercises from Chapter 4 on pages 286-287 #1, 2, 5, 7, 15, 19.
- Complete the practice quizzes for Chapters 3 and 4 (but only the questions that deal with the above topics as we skipped section 4.7). You can access the practices quizzes at www.thssmath.com or click [here](#).