

## Calculus 12 LG 5/6 Quiz Prep

Given a function, determine:

- a) the average rate of change on an interval.
- b) the instantaneous rate of change at a point.
- c) sketch tangent and secant lines.

Use the definition of the derivative to find the derivative of a function at a point and then find the equation of the tangent line.

Show that a function is continuous but not differentiable at a point.

Find the derivatives of various functions using shortcut methods:

- a) quotient rule.
- b) trig
- c) chain rule
- d) product rule

Given the graph of a function, graph the derivative function.

Word problem. Need to create an equation and then take the derivative.

Use a local linear approximation to estimate the value of a given quantity.