

BC Calculus

Unit 2

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3.2	Differentiability, Local Linearity, Numeric Derivatives	p. 114 QR 6-8 ex 1, 3, 7-9, 11, 13, 15, 17, 21, 23, 27, 35, 39
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Test		

3.1

Find the derivative at the indicated point.

Find the derivative of the function.

Match the graph of the function with the graph of the derivative.

Find the lines that are tangent and normal to the curve.

Solve application problems.

3.2

Determine where the function is continuous or differentiable.

Determine whether the function has a corner, a cusp, a vertical tangent, or a discontinuity.

Find the numerical derivative of the function at the indicated point.

Find all values of x for which the function is differentiable.

3.3

Find the derivative using the power rule, product rule, and quotient rule.

Find the horizontal tangents of the curve.

Find the values of the derivatives.

Find an equation for the line tangent to the curve at the given point.

Find the first four derivatives of the function.

Find an equation for the line perpendicular to the tangent to the curve at the given point.

3.4

Find rates of change.

Estimate velocities given a graph.

3.5

Find the derivative of trig functions.

Find the second derivative.

Find the body's velocity, speed, and acceleration at time t .

Find the jerk at time t .

Find equations for the lines that are tangent and normal to a function.

3.6

Use the given substitution and the chain rule to find the derivative.

Find the velocity of an object.

Find the derivative using the chain rule.

Find the value of the derivative of a composite function at a given value.

Find the equation of the line tangent to the curve at a point.