

MTHSC 102 SECTION 3.2-3 – SIMPLE RATE OF CHANGE FORMULAS

Kevin James

SIMPLE DERIVATIVE RULES

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|---------------|----------|---------------------|
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| Natural Log Rule | $y = \ln(x), \ (x > 0)$ | $\frac{dy}{dx} = \frac{1}{x}$ |

EXAMPLE

Suppose that $f(x) = 3x^3 - 4x^2 + 3x + 5e^x - 8\ln(x)$. Give a formula for $f'(x)$.