ONTARIO CALCULUS AND VECTORS, GRADE 12, UNIVERSITY PREPARATION (MCV4U) · UNIT B · 5 QUESTIONS

Derivatives and Their Applications — Practice Test

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1 **The derivative of f(x) = ln 3x is**

- **A** f'(x) = $\frac{1}{}$
- **B** f'(x) = $\frac{3}{}$
- **C** f'(x) = $\frac{1}{}$
- **D** f'(x) = x

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2 **The derivative of f(x) = ln 4x is**

- **A** f'(x) = $\frac{4}{}$
- **B** f'(x) = $\frac{1}{}$
- **C** f'(x) = $\frac{1}{}$
- **D** f'(x) = x

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3 **The derivative of f(x) = ln 5x is**

- **A** f'(x) = $\frac{5}{}$
- **B** f'(x) = $\frac{1}{}$
- **C** f'(x) = $\frac{1}{}$
- **D** f'(x) = x

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4 **On a roller coaster hill, the slope at a point is the derivative. The derivative of f(x) = x(x + 2) at x equal to 1 is**



A 5

B 3

C 4

D 2

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5 **The derivative of f(x) = x(x + 3) at x equal to 1 is**

A 6

B 4

C 3

D 5

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ANSWER KEY

1. A
2. B
3. C
4. C
5. D

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