Derivatives and Their Applications — Practice Test

Ontario Calculus and Vectors, Grade 12, University Preparation (MCV4U) • 10 questions

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **The derivative of f(x) = x(x + 4) at x equal to 1 is**

- A 6
- B 7
- C 5
- D 4

Understand It with Pulse | Flag a mistake

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

A 8

B 7

C 6

D 5

Understand It with Pulse | Flag a mistake

3 **The second derivative of f(x) = x^3 + 2x at x equal to 2 is**

A 6

B 24

C 14

D 12

Understand It with Pulse | Flag a mistake

4 The second derivative of $f(x) = x^3 + 3x$ at x equal to 2 is

- A 12
- B 6
- C 24
- D 15

Understand It with Pulse | Flag a mistake

5 The second derivative of $f(x) = x^3 + 4x$ at x equal to 2 is

- A 6
- B 12
- C 24
- D 16

Understand It with Pulse | Flag a mistake

6 **The second derivative of $f(x) = x^3 + 5x$ at x equal to 2 is**

- A 6
- B 24
- C 12
- D 17

Understand It with Pulse | Flag a mistake

7 **The critical point of $f(x) = x^2 - 4x$ is x equal to**

- A 3
- B 2
- C 1
- D 4

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8 The critical point of $f(x) = x^2 - 6x$ is x equal to

- A 4
- B 2
- C 6
- D 3

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9 The critical point of $f(x) = x^2 - 8x$ is x equal to

- A 5
- B 4
- C 3
- D 8

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10 **The critical point of $f(x) = x^2 - 10x$ is x equal to**

- **A** 6
- **B** 4
- **C** 5
- **D** 10

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ANSWER KEY

1.	A	**5.**	B	**9.**	B
2.	B	**6.**	C	**10.**	C
3.	D	**7.**	B		
4.	A	**8.**	D		

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