MANITOBA INTRODUCTION TO CALCULUS 45S · UNIT C · 25 QUESTIONS

Applications of Derivatives — Practice Test

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 definite integral from 0 to 2 of 2 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **The definite integral from 0 to 4 of 6 x plus 4 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **The derivative of $1x^2 + 1x$ at $x = 2$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **The limit as x approaches 5 of 3 x plus 1 is**

ANSWER _____

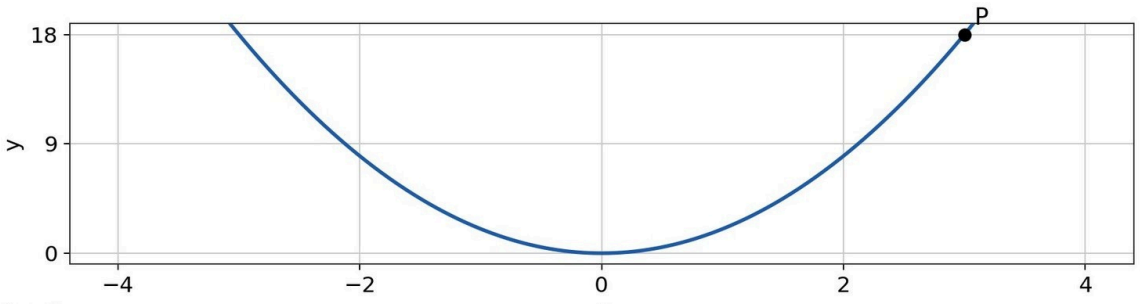
Understand It with Pulse | Flag a mistake

5 **The derivative of $2x^3$ at $x = 3$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **The graph shows $y = 2x^2$. The slope of the tangent at $x = 3$ is**



ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A polygon with eight sides is an**

A hexagon

B pentagon

C decagon

D octagon

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8 **A triangle with all sides equal is**

A equilateral

B isosceles

C scalene

D right

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9 **A triangle with no sides equal is**

A isosceles

B equilateral

C scalene

D right

Understand It with Pulse | Flag a mistake

10 **A triangle with two sides equal is**

A equilateral

B isosceles

C scalene

D obtuse

Understand It with Pulse | Flag a mistake

11 **An angle measuring 90 degrees is a**

A acute angle

B obtuse angle

C straight angle

D right angle

Understand It with Pulse | Flag a mistake

12 **Half of the diameter of a circle is the**

A circumference

B radius

C chord

D arc

Understand It with Pulse | Flag a mistake

13 **The distance around a circle is the**

A circumference

B diameter

C radius

D area

Understand It with Pulse | Flag a mistake

14 **The highest or lowest point of a parabola is the**

A intercept

B axis

C vertex

D root

Understand It with Pulse | Flag a mistake

15 **The line that divides a parabola into two equal halves is the**

A directrix

B asymptote

C tangent

D axis of symmetry

Understand It with Pulse | Flag a mistake

16 **The definite integral from 0 to 4 of 4 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **The definite integral from 0 to 2 of 6 x plus 1 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **The derivative of $3x^2 + 5x$ at x = 4 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **The limit as x approaches 5 of 6 x plus 1 is**

ANSWER _____

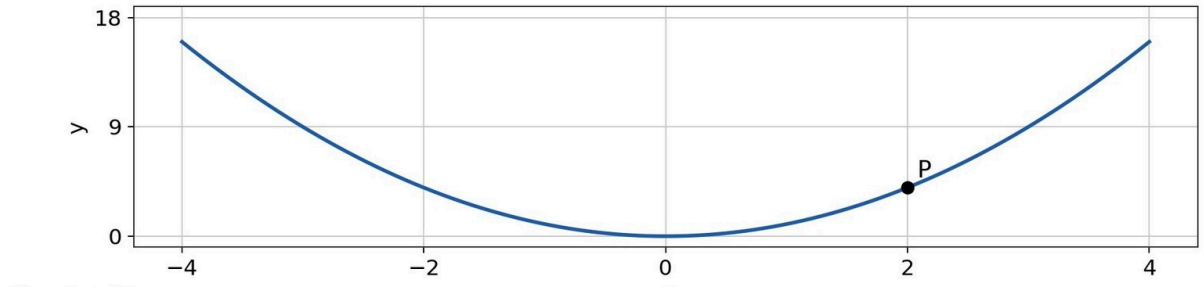
Understand It with Pulse | Flag a mistake

20 The derivative of 1 x^3 at x = 2 is

ANSWER

Understand It with Pulse | Flag a mistake

21 The graph shows y = 1x^2 . The slope of the tangent at x = 2 is



ANSWER

Understand It with Pulse | Flag a mistake

22 The definite integral from 0 to 3 of 3 is

ANSWER

Understand It with Pulse | Flag a mistake

23 The definite integral from 0 to 2 of 6 x plus 2 is

ANSWER

Understand It with Pulse | Flag a mistake

24 **The derivative of $4x^2 + 7x$ at $x = 5$ is**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **The limit as x approaches 5 of 2 x plus 1 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 4
2. 64
3. 5
4. 16
5. 54
6. 12
7. D
8. A
9. C
10. B
11. D
12. B
13. A
14. C
15. D
16. 16
17. 14
18. 29
19. 31
20. 12
21. 4
22. 9
23. 16
24. 47
25. 11

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