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

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **The definite integral from 0 to 4 of 6 x plus 3 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **The definite integral from 0 to 2 of 2 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **The definite integral from 0 to 2 of 6 x plus 5 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

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

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **The limit as x approaches 5 of 5 x plus 1 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **The definite integral from 0 to 4 of 6 x plus 5 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **The definite integral from 0 to 4 of 6 x plus 1 is**

ANSWER _____

Understand It with Pulse | Flag a mistake

16 **A straight line graph has a slope that is**

A increasing

B constant

C zero always

D undefined always

Understand It with Pulse | Flag a mistake

17 **The slope of a horizontal line is**

A one

B undefined

C zero

D negative

Understand It with Pulse | Flag a mistake

18 **The slope of a vertical line is**

A zero

B one

C negative

D undefined

Understand It with Pulse | Flag a mistake

19 **Two lines that never meet are**

A parallel

B perpendicular

C intersecting

D coincident

Understand It with Pulse | Flag a mistake

20 **Two lines that meet at a right angle are**

A parallel

B perpendicular

C coincident

D skew

Understand It with Pulse | Flag a mistake

21 **The point where a graph crosses the y axis is the**

A x intercept

B vertex

C y intercept

D origin

Understand It with Pulse | Flag a mistake

22 **The point where a graph crosses the x axis is the**

A y intercept

B vertex

C origin

D x intercept

Understand It with Pulse | Flag a mistake

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

A vertex

B intercept

C axis

D root

Understand It with Pulse | Flag a mistake

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

A directrix

B axis of symmetry

C asymptote

D tangent

Understand It with Pulse | Flag a mistake

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

A isosceles

B scalene

C equilateral

D right

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	21	**10.**	20	**19.**	A
2.	16	**11.**	22	**20.**	B
3.	12	**12.**	14	**21.**	C
4.	5	**13.**	26	**22.**	D
5.	54	**14.**	68	**23.**	A
6.	60	**15.**	52	**24.**	B
7.	11	**16.**	B	**25.**	C
8.	4	**17.**	C		
9.	29	**18.**	D		

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