NOVA SCOTIA CALCULUS 12 · UNIT E · 25 QUESTIONS

Introduction to Antiderivatives — 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 **An antiderivative F of $2x^2$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An antiderivative F of $3x^1$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An antiderivative F of $1x^3$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **An antiderivative F of $4x^2$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **An antiderivative F of $2x^3$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **An antiderivative F of $5x^1$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **An antiderivative F of $3x^2$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **An antiderivative F of $1x^2$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **An antiderivative F of $2x^4$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **An antiderivative F of $4x^1$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **An antiderivative F of $3x^3$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **An antiderivative F of $1x^4$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **An antiderivative F of $2x^1$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **An antiderivative F of $5x^2$ has F of 0 = 0 . Find F of 2 .**

ANSWER _____

Understand It with Pulse | Flag a mistake

15 **An antiderivative of 2x is**

A $x^2 + C$

B $2x^2 + C$

C $x + C$

D $2 + C$

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16 **The constant C in an antiderivative appears because**

A integration is exact

B the derivative of a constant is zero

C the function is linear

D C is always 1

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17 **An antiderivative of x^2 is**

A $3x^2 + C$

B $x^3 + C$

C $x^3 \div 3 + C$

D $2x + C$

Understand It with Pulse | Flag a mistake

18 **An antiderivative of e^x is**

- **A** $x\,e^x + C$
- **B** $e^x / x + C$
- **C** $1 + C$
- **D** $e^x + C$

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19 **An antiderivative of cos x is**

- **A** $\sin x + C$
- **B** $-\sin x + C$
- **C** $\cos x + C$
- **D** $\tan x + C$

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20 **An antiderivative of sin x is**

- **A** cos x + C
- **B** -cos x + C
- **C** sin x + C
- **D** -sin x + C

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21 **An antiderivative of $\frac{1}{x}$, for x greater than 0 , is**

- **A** x + C
- **B** $\frac{1}{x^2}$ + C
- **C** ln x + C
- **D** e^x + C

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22 **An antiderivative of a sum is**

- A the product of the antiderivatives
- B zero
- C the larger antiderivative
- D the sum of the antiderivatives

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23 **An antiderivative of 3 is**

- A $3x + C$
- B $3x^2 + C$
- C $x^3 + C$
- D 0

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24 **An antiderivative of x^n , for n not = -1 , is**

- **A** $n \times x^n - 1 + C$
- **B** $x^n + \frac{1}{n} + 1 , + C$
- **C** $x^n + C$
- **D** $n + 1 \times x^n + C$

Understand It with Pulse | Flag a mistake

25 **If F' = f, then F is called**

- **A** a derivative of f
- **B** an inverse of f
- **C** an antiderivative of f
- **D** a limit of f

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 5.33
2. 6
3. 4
4. 10.67
5. 8
6. 10
7. 8
8. 2.67
9. 12.8
10. 8
11. 12
12. 6.4
13. 4
14. 13.33
15. A
16. B
17. C
18. D
19. A
20. B
21. C
22. D
23. A
24. B
25. C

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