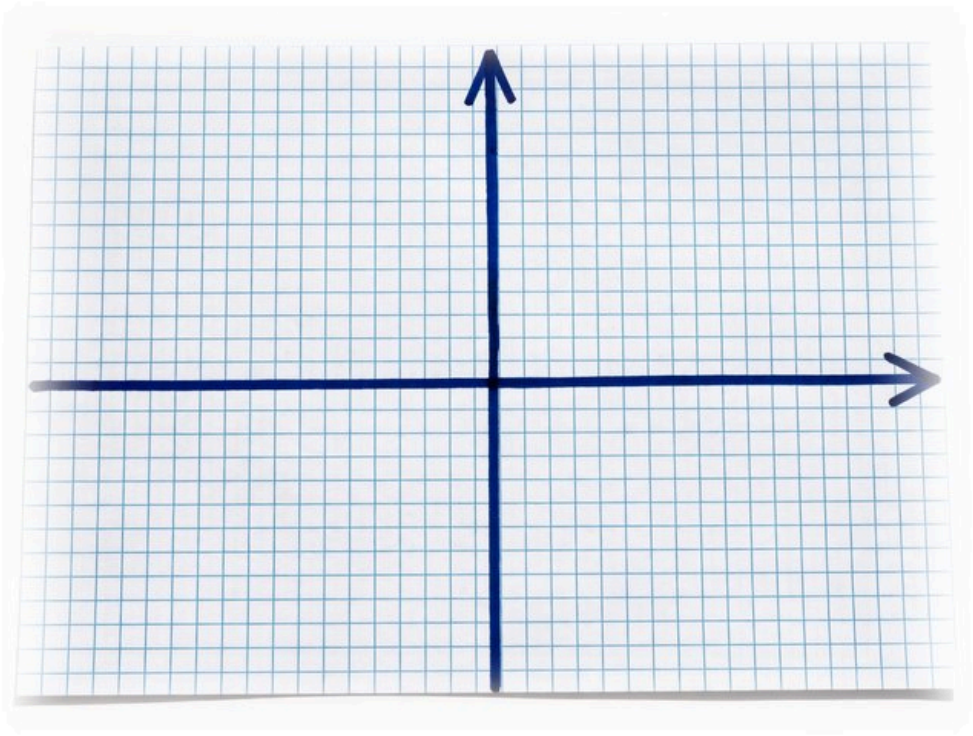
BRITISH COLUMBIA CALCULUS 12 (MCALC12) · UNIT D · 5 QUESTIONS

# Integration and Applications — 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** $\int 4x^3\,dx$ is



A $x^4 + C$

B $4x^4 + C$

C $12x^2 + C$

D $x^3 + C$

Understand It with Pulse

Flag a mistake

**2** $\int \sin x \, dx$ is

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

Understand It with Pulse | Flag a mistake

**3** $\int \sqrt{x} \, dx$ is

- **A** $\frac{2}{3}x^{3/2} + C$
- **B** $\frac{1}{2}x^{1/2} + C$
- **C** $2x^{3/2} + C$
- **D** $\frac{3}{2}x^{3/2} + C$

Understand It with Pulse | Flag a mistake

4 $\int_0^3 x^2\,dx$ is

A 27

B 9

C 3

D 18

Understand It with Pulse | Flag a mistake

5 $\int_0^{\pi} \sin x\,dx$ is

A 0

B 1

C 2

D -2

Understand It with Pulse | Flag a mistake

## ANSWER KEY

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

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