Edulyte

ANTI-DERIVATIVE FORMULA

Antiderivative is a function that typically does something that is the reverse of what the derivative will do. A function has many antiderivatives, all of which are functions and an arbitrary constant. The antiderivatives play an essential part in indefinite integrals, and they help to simplify a complicated expression that makes the entire calculation very easy.

Read more

Q1: What is the antiderivative of x^2?

A: x^2
B: x^3/3
C: 2x
D: 3x^2

Q2: Which trigonometric function's antiderivative is -cos(x)?

A: sin(x)
B: cos(x)
C: tan(x)
D: cot(x)

Q3: What is the antiderivative of 2/x?

A: 2x
B: ln(x)
C: 2ln(x)
D: x^2

Q4: What are the Rules of Antiderivative Calculation?

A: Power Rule
B: Exponential Rule
C: Trigonometric Rule
D: All of these

Q5: What is the antiderivative of 2x?

A: $x^2 + C$
B: x^2
C: $x^2 - C$
D: x

Q6: Identify the Techniques of Integration

A: Substitution
B: Integration by Parts
C: Both A and B
D: None of these

Q7: What is the antiderivative of x/3?

A: x^3
B: x^3 - C
C: x + 3
D: 3ln(x)

Q8: What is the antiderivative of sin4t?

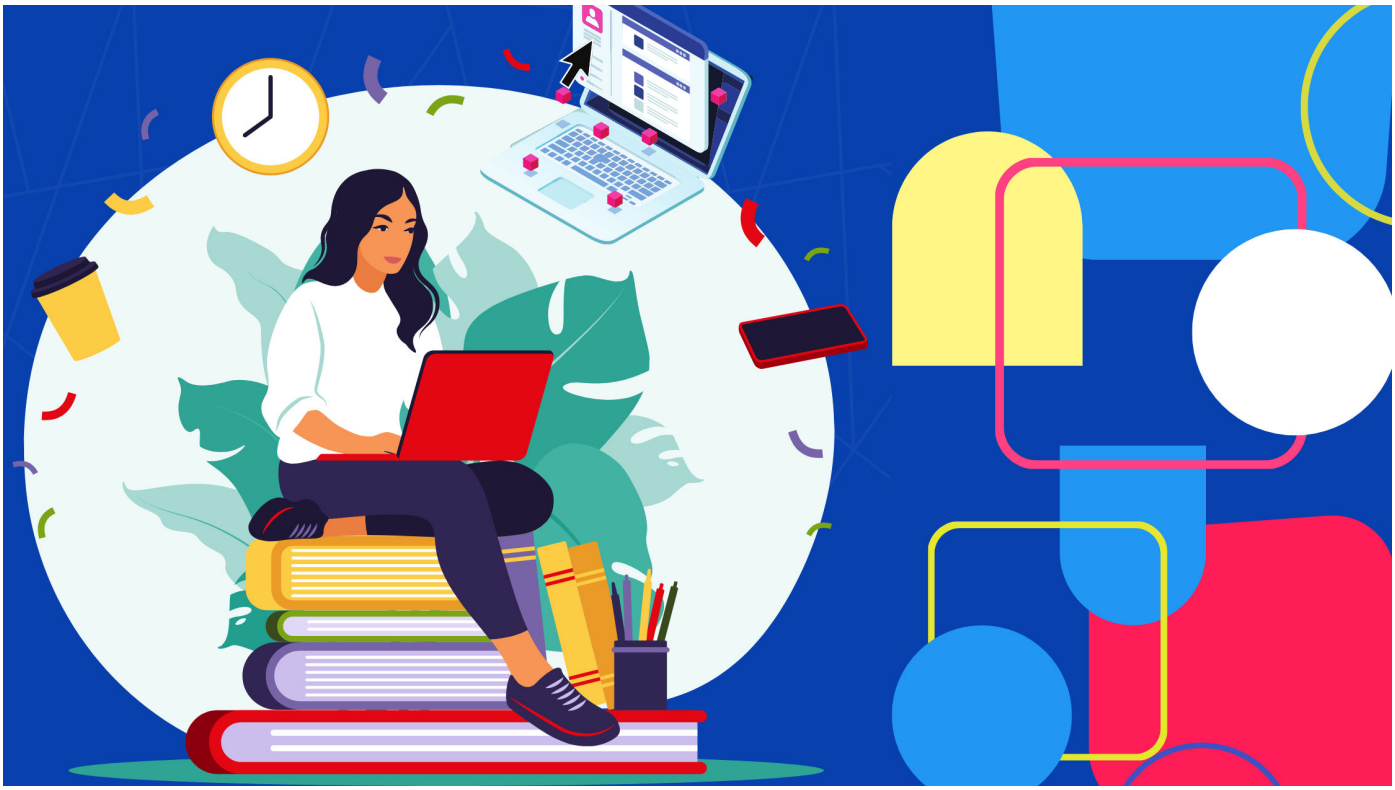
A: −14cos(4t)
B: Cos 4t
C: 14 cos(t)
D: -4cos(t)

Q9: Where can you use the Antiderivatives in real life?

A: Car speed
B: Walking distance
C: Stock
D: All of these

Q10: What is the antiderivative of x^2?

A: x + 2
B: x^2
C: ⅓ x^3
D: x^3



Answers

Q1: C - 2x

Q2: B - cos(x)

Q3: C - 2ln(x)

Q4: D - All of these

Q5: A - $x^2 + C$

Q6: C - Both A and B

Q7: D - 3ln(x)

Q8: A - −14cos(4t)

Q9: D - All of these

Q10: C - $\frac{1}{3} x^3$