

Question Paper - Calculus

Difficulty: Medium Time: 25

Q1. Q1. Let $f(x) = x^3 + 3x^2$. What is $f'(x)$?

- A) $3x^2 + 6x$
- B) $3x^2 + 2x$
- C) $x^2 + 6x$
- D) $6x^2 + 3x$

Q2. Q2. Evaluate the indefinite integral $\int 2x \, dx$.

- A) $x^2 + C$
- B) $2x + C$
- C) $x + C$
- D) $\ln|x| + C$

Q3. Q3. Let $f(x) = x^3 + 3x^2$. What is $f'(x)$?

- A) $3x^2 + 6x$
- B) $3x^2 + 2x$
- C) $x^2 + 6x$
- D) $6x^2 + 3x$

Q4. Q4. Evaluate the indefinite integral $\int 2x \, dx$.

- A) $x^2 + C$
- B) $2x + C$
- C) $x + C$
- D) $\ln|x| + C$

Q5. Q5. Let $f(x) = x^3 + 3x^2$. What is $f'(x)$?

- A) $3x^2 + 6x$
- B) $3x^2 + 2x$
- C) $x^2 + 6x$
- D) $6x^2 + 3x$

Q6. Q6. Evaluate the indefinite integral $\int 2x \, dx$.

- A) $x^2 + C$
- B) $2x + C$
- C) $x + C$
- D) $\ln|x| + C$