Test-1: Calculus I

1. What is the value of $\int_0^1 x^2 dx$?

(A) $\dfrac{1}{2}$ (B) $\dfrac{1}{3}$ (C) $\dfrac{1}{4}$ (D) $\dfrac{1}{5}$

2. What is the value of $\int_0^1 x^3 dx$?

(A) $\dfrac{1}{4}$ (B) $\dfrac{1}{2}$ (C) $\dfrac{1}{3}$ (D) $\dfrac{1}{5}$

3. What is the value of $\int_0^1 x^4 dx$?

(A) $\dfrac{1}{5}$ (B) $\dfrac{1}{3}$

(C) $\dfrac{1}{3}$ (D) $\dfrac{1}{5}$

4. What is the value of $\int_0^1 x^5 dx$?

(A) $\dfrac{1}{5}$ (B) $\dfrac{1}{2}$ (C) $\dfrac{1}{3}$ (D) $\dfrac{1}{4}$

(E) $\dfrac{1}{6}$

Answers

1. (B)   2. (A)   3. (A) (D)   4. (E)

Solutions

1. Solution is $\dfrac{1}{3}$

2. Solution is $\dfrac{1}{4}$

3. Solution is $\dfrac{1}{5}$

4. Solution is $\dfrac{1}{6}$