

TOPIC

Mathematics

QUESTION

The length of the curve $y = x^2$ from $x = 0$ to 3 most nearly is

- (A) 3.000
- (B) 9.000
- (C) 9.487
- (D) 9.747

HINT

The length of a curve $y(x)$ from $x = a$ to b is given by

$$s = \int_a^b \sqrt{1 + \left(\frac{dy}{dx}\right)^2} dx$$

ACKNOWLEDGEMENT

This question of the day was provided by the courtesy of Professor [Autar Kaw](#) of the [University of South Florida](#) from the book [Fundamentals of Engineering Examination Sample Questions General Engineering](#).