

TOPIC

Engineering Mechanics (Statics and Dynamics) – Section VII – Question 9

QUESTION

A body is traveling in a straight line. The equation of motion is given by

$$x(t) = 5t^3 + 3t^2 - 6t$$

where

x is given in meters, and

t is given in seconds.

The acceleration of the body in m/s^2 at $t = 5.25$ seconds most nearly is

(A) 6.000

(B) 163.5

(C) 436.8

(D) 752.9

CONTRIBUTOR

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