During a short interval of time the speed v in m/sof an automobile is given by v = at2 + bt3,
where the time t is in seconds. The units of a and where the time t is in seconds.

A. $m \cdot s^2$; $m \cdot s^4$ B. s^3/m ; s^4/m C. m/s^2 ; m/s^3 D. m/s^3 ; m/s^4 E. m/s^4 ; m/s^5 m/s^5

$$V = at^{2} + bt^{3}$$

$$d = L^{1} + bt^{3}$$

$$d = L^{2} + bt^{3}$$

$$d = L^{2} + bt^{3}$$

$$d = L^{3} + bt^{3}$$

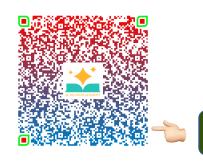
$$d = L^{2} + bt^{3}$$

$$d = L^{3} + bt^{3}$$

$$d = L^{2} + bt^{3}$$

$$d = L^{3} + bt^{3}$$

$$d = L^$$



Suppose A = BC, where A has the dimension L/T. Then BL/M and C has the dimension L/T. Then Bhas the dimension: A = BC A = BChas the dimension A = BC A = B

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Suppose A = B^nC^m,
where \underline{A} has dimensions LT,
\underline{B} has dimensions L^2T^{-1},
and \underline{C} has dimensions LT^2.

Then the exponent \underline{D} and \underline{D} have the values:

A. 2/3; 1/3
B. 2; 3
C. 4/5; -1/5
E. 1/2; 1/2
Ans: \underline{D}

Ans: \underline{D}

Ans: \underline{D}
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