

A building lot has a width of 75.0ft a length of 125ft and a height 100ft.

If a volume depend as

$$V = \text{width} \times \text{length} \times \text{height}$$

Express this volume in ( $\text{m}^3$ ) :

- A.  $2.65 \times 10^4 \text{ m}^3$
- B.  $2.65 \times 10^5 \text{ m}^3$
- C.  $8.70 \times 10^4 \text{ m}^3$
- D.  $8.70 \text{ m}^3$

The average velocity is given by

$$v = x \div t$$

"x" Is position measured in mi and "t" is the time measured in second, the dimension of the "v", is:

- A. L
- B. L/T
- C. TL
- D. T/L

The SI base unit for length is:

- A. Foot
- B. Inch
- C. meter
- D. Centimetre

The dimension of the Time denoted by :

- A. M
- B. T
- C. X
- D. L

**The average speed of a moving object during a given interval of time is always:**

- A. one-half its speed at the end of the interval
- B. the magnitude of its average velocity over the interval
- C. its acceleration multiplied by the time interval
- D. the distance covered during the time interval divided by the time interval

**A rectangular building lot has a width of 75.0 ft, and a length of 125 ft . If area defined as  $A = \text{width} * \text{length}$  , express this area in (  $\text{m}^2$  ). »  $1\text{ft} = 0.3048\text{m}$  «**

- A.  $2.85 * 10^3 \text{ m}^2$
- B.  $8.70 * 10^2 \text{ m}^2$
- C.  $2.85 * 10^5 \text{ m}^2$
- D.  $8.70 \text{ m}^2$

**The SI base unit for mass is ...?**

- A. Pound
- B. Ounce
- C. Kilogram
- D. Gram

**Suppose  $A = B * C^2$ . Where A has the dimension  $L/M$  and C has the dimension  $L/T$ . Then B has the dimension..:**

- A.  $L^2/TM$
- B.  $T/M$
- C.  $T^2/ML$
- D.  $TM/L^2$

**Average velocity defined as :**

- A.  $(X_f - X_i) / (t_i - t_f)$
- B.  $V / t$
- C.  $(X_f - X_i) / (t_f - t_i)$
- D.  $(t_i - t_f) / (X_i - X_f)$

**The acceleration is given by  $a = \Delta v / \Delta t$ , where  $\Delta v$  is velocity measured in mi/h. And  $\Delta t$  is the time measured in second, the dimension of the ( a ) is :**

- A.  $L^2 / T$
- B.  $L / T^2$
- C.  $L^2$
- D.  $L^3$