

L3 PHYSICS HOMEWORK

1. Which of the following is a fundamental physical quantity?

Weight , Density, Length , Volume

2. Define a derived physical quantity.

3. A machinist measures the length of a steel rod to be 25.3 cm. The actual blueprint length of the rod is exactly 25.0 cm. Calculate the Absolute Error. Relative Error and Percentage Error.

4. A metal block measures 5 cm by 4 cm by 10 cm. Calculate The volume of the block.

5.

A car moving along a straight road ABC as shown in Fig. 2.7 maintains an average speed of 90 km/h between points A and B and 36 km/h between points B and C.

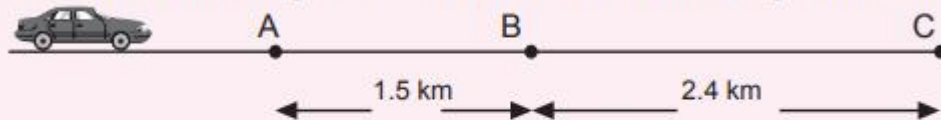


Fig. 2.7: Car moving along a straight line

Calculate the:

- (a) Total time taken in seconds by the car between points A and C.
- (b) Average speed in metres per second of the car between points A and C.