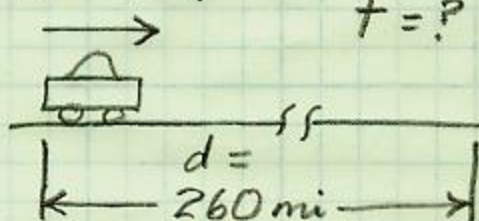


1.

Given: A car travels at 65 miles per hour for 260 miles. How long does the trip take?

$$s = 65 \text{ mi/hr}$$

$$t = ?$$



Assume car does not make any stops.

Find: t , time of trip in hours

Relationships: Distance traveled is equal to speed times time of travel.

Where $d = \text{distance (mi)}$

$s = \text{speed (mi/hr)}$

$t = \text{time (hr)}$

Then $d = s \cdot t$

Solving for t ,

$$t = d/s$$

Solution:
$$t = \frac{260 \text{ mi}}{65 \frac{\text{mi}}{\text{hr}}} = 4 \cdot \cancel{\text{mi}} \cdot \frac{\text{hr}}{\cancel{\text{mi}}}$$

$$t = \underline{\underline{4 \text{ hr}}}, \text{ time of travel}$$

Check: $d = s \cdot t = 65 \frac{\text{mi}}{\cancel{\text{hr}}} \cdot 4 \cancel{\text{hr}} = 260 \text{ mi}$
 $\checkmark \text{ OK}$