

NAME: _____

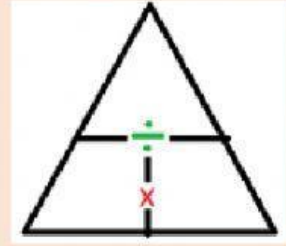
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SPEED CALCULATIONS

Speed can be calculated using the equation: $\text{SPEED} = \text{DISTANCE} / \text{TIME}$.

The unit of measurement for speed depends on the units for distance and time used.

Complete the triangle to the right using S, D and T.
(The first line for each answer is for the correct EQUATION).



1a. Work out the speed of a car travelling 100 meters in 10 seconds.

$$\begin{aligned}\text{Speed} &= \underline{\hspace{2cm}} / \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ m} / \underline{\hspace{2cm}} \text{ s} \\ &= \underline{\hspace{2cm}} \text{ m/s}\end{aligned}$$

b. Work out the speed of a horse travelling 700 kilometers in 35 hours.

$$\begin{aligned}\text{Speed} &= \underline{\hspace{2cm}} / \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ km} / \underline{\hspace{2cm}} \text{ h} \\ &= \underline{\hspace{2cm}} \text{ km/h}\end{aligned}$$

c. Calculate the speed of a giraffe travelling 70 miles in 2 hours.

$$\begin{aligned}\text{Speed} &= \underline{\hspace{2cm}} / \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ m} / \underline{\hspace{2cm}} \text{ h} \\ &= \underline{\hspace{2cm}} \text{ mph}\end{aligned}$$

2a. How far (**distance**) does a truck travel if it is travelling at 20 meters per second for 30 seconds?

$$\begin{aligned}\text{Distance} &= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ m/s} \times \underline{\hspace{2cm}} \text{ s} \\ &= \underline{\hspace{2cm}} \text{ m}\end{aligned}$$

b. How far (**distance**) does a Jet plane travel if it is travelling at 550 miles per hour for 12 hours?

$$\begin{aligned}\text{Distance} &= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ mph} \times \underline{\hspace{2cm}} \text{ h} \\ &= \underline{\hspace{2cm}} \text{ miles}\end{aligned}$$

c. How far (**distance**) does a boy travel if he is moving at 12 km per hour for 6 hours?

$$\begin{aligned}\text{Distance} &= \underline{\hspace{2cm}} \times \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ km/h} \times \underline{\hspace{2cm}} \text{ h} \\ &= \underline{\hspace{2cm}} \text{ km}\end{aligned}$$

3a. How long (**time**) does it take a cat to travel if it runs 20 meters at 5 meters per second?

$$\begin{aligned}\text{Time} &= \underline{\hspace{2cm}} / \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ m} / \underline{\hspace{2cm}} \text{ m/s} \\ &= \underline{\hspace{2cm}} \text{ s}\end{aligned}$$

b. How long (**time**) does it take a delivery van to travel if it drives 45 meters at 9 meters per second?

$$\begin{aligned}\text{Time} &= \underline{\hspace{2cm}} / \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ m} / \underline{\hspace{2cm}} \text{ m/s} \\ &= \underline{\hspace{2cm}} \text{ s}\end{aligned}$$

c. How long (**time**) does it take a pizza delivery guy to travel if he 60 miles at 15 miles per hour?

$$\begin{aligned}\text{Time} &= \underline{\hspace{2cm}} / \underline{\hspace{2cm}} \\ &= \underline{\hspace{2cm}} \text{ miles} / \underline{\hspace{2cm}} \text{ h} \\ &= \underline{\hspace{2cm}} \text{ h}\end{aligned}$$