



Speed, Distance & Time

Speed, Distance, Time Calculations



How to change minutes into a decimal

$$15 \text{ mins} = 0.25 \text{ hour}$$

$$\text{So: } 3 \text{ hours } 15 \text{ mins} = 3.25 \text{ hours}$$

$$30 \text{ mins} = 0.5 \text{ hour}$$

$$\text{So: } 7 \text{ hours } 30 \text{ mins} = 7.5 \text{ hours}$$

$$45 \text{ mins} = 0.75 \text{ hour}$$

$$\text{So: } 2 \text{ hours } 45 \text{ mins} = 2.75 \text{ hours}$$

The 3 formulas for Speed, Time & Distance:

$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

Solving for **Speed**

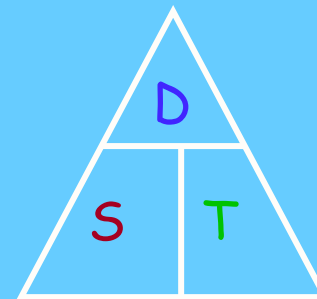
$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

Solving for **Time**

$$\text{Distance} = \text{Speed} \times \text{Time}$$

Solving for **Distance**

Remember them from
this triangle:



A windsurfer travelled 28 km in 1 hour 45 mins.
Calculate his speed.

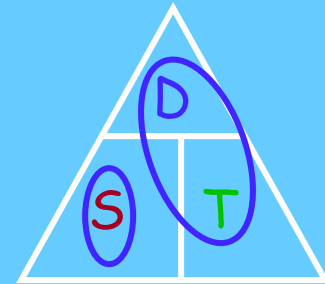
$$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$$

$$= \frac{28}{1.75}$$

—————→ 1 hour 45 mins

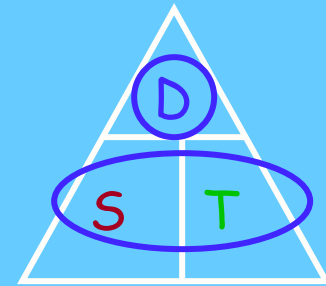
$$= 16 \text{ km/h}$$

Answer: His speed was 16 km / hour



A salesman travelled at an average speed of 50 km/h for 2 hours 30 mins. How far did he travel?

Distance = Speed \times Time



$$= 50 \times 2.5 \longrightarrow 2 \text{ hour } 30 \text{ mins}$$

$$= 125 \text{ km}$$

Answer: He travelled 125 km

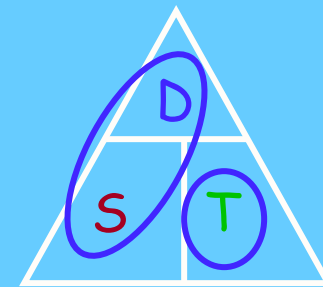
A train travelled 555 miles at an average speed of 60 mph. How long did the journey take?

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}}$$

$$= \frac{555}{60}$$

$$= 9.25 \text{ hours} = 9 \text{ hours } 15 \text{ mins}$$

Answer: It took 9 hours 15 minutes





Thank You