Speed, Distance, Time

You should be able to: Change hours & minutes into hours.

Change hours into hours & minutes.

Find the speed when given D & T.

Find the distance when given S & T.

Find Time when given D & S.

Use the formula:- S =
$$\frac{D}{T}$$

$$T = \frac{D}{S}$$

Note:

When finding a speed in mph, the distance must be in Miles and the time in Hours. When finding a speed in Miles the distance must be in Metres and the time in <u>seconds</u> etc. Calculations will not make sense otherwise.

Example 1

Change 5 hours 30 minutes into hours.

5 hrs
$$30 \, \text{min} = \frac{1}{2} \text{hr} = 0.5 \text{hrs}$$

So 5 + 0.5 hrs

Example 2

Change 8 hrs 36 min into hrs.

$$36 \div 60 = 0.6 \, \text{hrs}$$

$$8 + 0 - 6 \, hrs$$

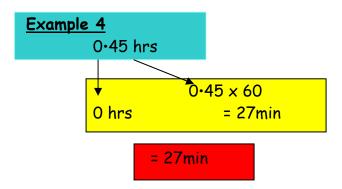
= 8·6 hrs



Example 3

Change 7.75 hrs into hrs and min.

7 hrs 0.75 hrs x 60 = 45 min



Example 5

Time = 25min D = 15 hrs Find the speed in ??

$$S = \frac{D}{T} = \frac{15}{0.42}$$

= 36

25 ÷ 60 = 0•42

Or 35.7 if you Rounded to 1dp

Example 6

D = 1040 miles S = 320 mph

$$T = \frac{D}{S}$$

$$T = \frac{1040}{320} = 3.25 \text{ hrs}$$

= 3 hrs 15 min

Example 7

Time = 4.5 hrs S = 70 mph

= 315 miles