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:- $S = \frac{D}{T}$ $T = \frac{D}{S}$ $D = ST$

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 seconds etc.
Calculations will not make sense otherwise.

Example 1
Change 5 hours 30 minutes into hours.

5 hrs 30 min = ½hr = 0·5hrs

So 5 + 0·5 hrs

= 5·5 hrs

Min ⟶ Hrs
÷ 60

Example 2
Change 8 hrs 36 min into hrs.

8 hrs 36 min to hours just divide
36 ÷ 60 = 0·6 hrs

8 + 0 – 6 hrs

= 8·6 hrs

Hrs ⟶ Min
x 60

Example 3
Change 7·75 hrs into hrs and min.

7 hrs 0·75 hrs x 60
= 45 min

= 7hrs 45min

Example 4

0·45 hrs

0 hrs

0·45 x 60

= 27min

= 27min

Example 5

Time = 25min D = 15 hrs

Find the speed in ??

$S = \frac{D}{T} = \frac{15}{0 \cdot 42}$ = 36

25 ÷ 60

= 0·42

Or 35·7 if you Rounded to 1dp

Example 6

D = 1040 miles S = 320mph

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

$T = \frac{1040}{320}$ = 3·25 hrs

= 3 hrs 15 min

Example 7

Time = 4·5 hrs S = 70mph

D = S T

= 4·5 x 70

= 315 miles