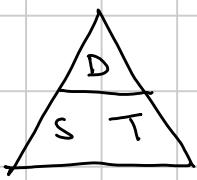


TIME, DISTANCE and SPEED

Note Title

08/05/2009

We can use a triangle to remember the formulae:-



$$D = S \times T$$

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

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

Examples

- ① A car travels at 45 miles per hour for 3 hours 20 min
How far does it travel?

$$D = 45 \frac{\text{miles}}{\text{hour}} \times 3\frac{1}{3} \text{ hours} \quad (\text{use fractions on calculator})$$

$= 150 \text{ miles}$

3.20m is NOT
3.20 hours)

- ② A car travels 210 miles at a speed of 50 miles per hour. How long does the journey take?

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

$= \frac{210 \text{ miles}}{50 \text{ miles/hour}}$

$= 4.2 \text{ hours}$

$= 4 \text{ hours} + \frac{2}{10} \text{ of an hour}$

$= \underline{\underline{4 \text{ hours } 12 \text{ minutes}}}$

- ③ A car travels 30 miles in 25 minutes. What is its speed in miles per hour

Method 1

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

$= \frac{30 \text{ miles}}{25 \text{ minutes}}$

$= 1.2 \text{ miles per minute}$