METRIC Vs IMPERIAL SYSTEMS

- Metric → SA. new system

- Imperial → oldest system, USA

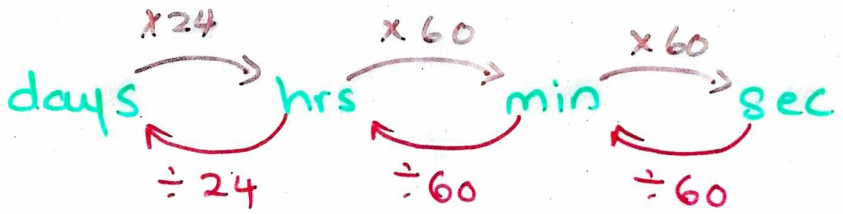
⇒ When converting → set up ratio, solve for unknown

* Conversion factors will always be given *

CUBIC Vs Litres

$$1\,cm^3 = 1\,ml$$
$$\therefore 1000\,cm^3 = 1000\,ml = 1\,l$$

* TIME *



- Time is not a decimal system ⇒ its conversion factor is (60). If you get 3,2 on your calculator screen it does not mean 3hrs + 20 mins ✗

3,2 hrs
= 3 hr + 0,2 of the 4th hr
= 3 hr + (0,2 x 60)
= 3 hr + 12 min.

Eg. 1. Convert 21 min to sec

21 x 60
= 1260 sec.

2. 192 mins to hrs and min

$192 \div 60$

$= 3,2$

$= 3 + (0,2 \times 60)$

$=$ 3hrs and 12min.

3. 78 hrs to days and hours

$78 \div 24$

$= 3,25$

$=$ 3 days + 0,25 of a day

$=$ 3 days + $(0,25 \times 24)$

$=$ 3 days + 6 hrs

ADDING AND SUBTRACTING TIME

1. If lesson 1 starts at 8:08 and and lesson 2 starts at 8:59, how much time has lapsed?

$$\begin{array}{r} 8:59 \\ -\ 8:08 \\ \hline 0:51 \end{array}$$

say 59 mins
08

$\Rightarrow$ 51 min

2. School starts at 7:47 and ends at 13:40 → How much time are you spending at school!?

$$\begin{array}{r} 12\ \ 100 \\ \cancel{13}:\cancel{40} \\ -\ 07:47 \\ \hline 5:53 \end{array}$$

you are borrowing 1 hr ∴ when you bring to min column it becomes (40 min + 60 = 100 min

5 hrs and 53 min.

3. I arrived at the mall at 7:36. I spent 8 hrs 25 mins. What time did I leave the mall?

$$\begin{array}{r} 7:36 \\ +\ 8:25 \\ \hline 16:01 \end{array}$$

$36 + 25 = 61$

$\therefore 60 + 1$

becomes 1 hr

I left at 16:01