

Q = Production manager plans to produce 100 units with help of 25 workers who work 4 hours a day. How many ~~worker~~<sub>units</sub> can be produce by 40 workers if they work 3 hours/day?

Solve = Using arrow method

hours	Men	Units
↑ 4	↑ 25	100 ↑
↓ 3	↓ 40	x ↓

$$\frac{x}{100} = \frac{40 \times 4}{25 \times 3} \times \frac{3}{4 \times 1}$$

$$\frac{x}{100} = \frac{3}{5} \Rightarrow 5x = 300$$

$$x = \frac{300}{5}$$

$$x = 60 \text{ units}$$

Q = Ali buys 3 books for Rs. 16 each & 4 books for Rs. 23 each. what will be average price of books?

Solve = Total price of 3 books =  $16 \times 3 = 48$

Total price of 4 books =  $23 \times 4 = 92$

Sum of prices of total (7 books) =  $48 + 92 = 140$

Total books = 7

Average =  $\frac{\text{sum of all values}}{\text{Total number of values}}$

$$A = \frac{140}{7}$$

$$A = 20$$

Average Price of Books

Q = A car travelled 100km with half the distance at 40km/h & other half at 80km/h.  
Find average speed of car?

Solve = Total distance covered = 100km  
50km covered at speed = 40km/h  
Remaining covered at speed = 80km/h

Average speed = ?

$$A = \frac{\text{sum of all values}}{\text{Total no of values}}$$

$$A = \frac{120 \text{ km/h}}{2}$$

$$A = 60 \text{ km/h}$$

Q = When 3 coins are tossed what is probability of getting at most 2 tails?

Solve = Prob(2 Tails) =  $\frac{\text{No of ways an event occur}}{\text{Total possible outcomes}}$

$$= \frac{2^1}{2^3}$$

$$\text{Prob}(2 \text{ Tails}) = \frac{1}{3}$$