

①

$$\text{Total Parts} = 2 + 3 = 5$$

$$\text{Rahul's share} = (2/5) \times 10 = 4 \text{ slices}$$

$$\text{Ravi's share} = (3/5) \times 10 = 6 \text{ slices}$$

②

$$\text{Total} = 4 + 6 = 10$$

$$\text{Anu} = (4/10) \times 100 = 40$$

$$\text{Tina} = (6/10) \times 100 = 60$$

③

$$\text{ratio} = 3000 : 6000$$

$$= 1 : 2$$

④

$$\text{Total} = 2 + 3 = 5$$

$$\text{Milk} = 2 : 3$$

⑤

$$\text{Let Take } a = 3x, b = 2x$$

$$a \rightarrow \text{Elder}$$

$$b \rightarrow \text{Younger}$$

$$\text{Elder is 15 years}$$

$$3x = 15$$

$$x = \frac{15}{3} = 5$$

$$\text{Now the younger Brother age is } = 2x$$

$$= 2 \times 5$$

$$= 10 \text{ years}$$

⑥

$$\text{Let Take Amit} = 2x, \text{ Raj} = x$$

$$\text{Total} = 2x + x$$

$$= 3x = 60$$

$$x = \frac{60}{3} = 20$$

$$\text{Raj} = x = 20 \text{ chocolates}$$

$$\text{Amit} = 2x = 40 \text{ chocolates}$$

$$(7) \text{ Cost of 1 pen} = 50/5 = 10 \text{ rupees. Each}$$

$$\text{Cost of 8 pens} = 8 \times 10 = \underline{\underline{80 \text{ rupees.}}}$$

$$(8) \text{ Speed} = \frac{d}{t} = \frac{120}{2} = 60 \text{ km/h}$$

$$\text{Distance in 5} = 60 \times 5 = \underline{\underline{300 \text{ km}}}$$

$$(9) \text{ Sugar : Flour}$$

$$1 : 4$$

$$\text{Sugar} = \frac{1}{4} = \underline{\underline{0.25 \text{ kg}}}$$

$$(10) \text{ Cost of 1 orange} = 36/12 = 3$$

$$\text{No of orange} = \frac{150}{3} = \underline{\underline{50 \text{ oranges}}}$$

$$(11) \begin{array}{l} \text{1st son} \rightarrow 12 \text{ years} \\ \text{2nd son} \rightarrow 15 \text{ years} \end{array}$$

$$\text{HCF of 12, 15 is 3}$$

$$12 : 15 = \frac{12}{3} : \frac{15}{3}$$

$$= 4 : 5$$

$$\text{we can get } 4+5 = 9 \text{ parts}$$

$$1 \text{ part} = \frac{6000}{9} = 666.6$$



1<sup>st</sup> son =  $4 \times 666.6$   
 $= 2666.6$  Rupees

2<sup>nd</sup> son =  $5 \times 666.6$   
 $= 3333.3$  Rupees

and the total amount is  $= 2666.6$   
 $+ 3333.3$

$5999.9$  (Approx)

(12)  $A : B : C = 3 : 2 : 1$

Total =  $3 + 2 + 1 = 6$

$A = \left(\frac{3}{6}\right) \times 12000 = 6000$  Rupees

$B = \left(\frac{2}{6}\right) \times 12000 = 4000$  Rupees

$C = \left(\frac{1}{6}\right) \times 12000 = 2000$  Rupees

(13)  $7 + 3 = 10$

Milk =  $\left(\frac{7}{10}\right) \times 10$

Milk =  $\left(\frac{7}{10}\right) \times 10 = 7$  liters

(14)  $X : Y : Z = 5 : 6 : 7$

If Y earns 60000

Y = 6 parts

1 part =  $\frac{60000}{6} = 10,000$

W has 7 parts.

$$Z = 7 \times 10000$$

$$= \underline{\underline{70000 \text{ rupees}}}$$

(15)

$$3 : 4$$

1<sup>st</sup> person  $\rightarrow 3$

2<sup>nd</sup> person  $\rightarrow 4$

Distance  $\propto$  Speed.

$$\text{2<sup>nd</sup> person distance} = \left(\frac{4}{3}\right) \times 18 = \underline{\underline{24 \text{ km}}}$$

(16)

$$\text{Water} = 40\% \text{ of } 5 = 0.4 \times 5 = 2 \text{ liter.}$$

$$\text{Alcohol} = 60\% \text{ of } 5 = 0.6 \times 5 = \underline{\underline{3 \text{ liter}}}$$

(17)

$$A \rightarrow 5000 \times 6 = 30000$$

$$B \rightarrow 3000 \times 6 = 18000$$

The ratio is  $30000 : 18000$

$$5 : 3$$

$$= 5 + 3 = 8$$

$$A's \text{ share} = \left(\frac{5}{8}\right) \times 2400 = 1500 \text{ rupees.}$$

$$B's \text{ share} = \left(\frac{3}{8}\right) \times 2400 = 900 \text{ rupees.}$$

(OR)

$$B's \text{ share} = 2400$$

$$- 1500$$

$$\underline{\underline{900 \text{ rupees}}}$$



(18)

A & B invested for 12 months  
C — 8 months

$$A = 6000 \times 12 = 72000$$

$$B = 9000 \times 12 = 108000$$

$$C = 3000 \times 8 = 24000$$

$$\text{Ratio is } 72000 : 108000 : 24000$$

$$\div 12000$$

$$\text{we get } 6 : 9 : 2$$

$$\text{Total} = 6 + 9 + 2 = 17$$

$$C's \text{ share} = \left(\frac{2}{17}\right) \times 12000$$

$$= 1411.76 \text{ (Approx)}$$

(19)

$$A = 2000 \times 12 = 24000$$

$$B = 3000 \times 9 = 27000$$

$$\text{Ratio} = 24000 : 27000$$

$$\div \text{it by } 3000$$

$$8 : 9$$

(20)

$$2 : 3 : 5 = A : B : C$$

$$\text{Total} = 2 + 3 + 5 = 10$$

$$B's \text{ share} = \left(\frac{3}{10}\right) \times 10000$$

$$= 3000 \text{ rupees}$$

(21)

$$A \rightarrow 2000 \times 4 = 16000$$

$$B \rightarrow 5000 \times 6 = 30000$$

$$C \rightarrow 6000 \times 12 = 72000$$

$$\text{Ratio} = 16000 : 30000 : 72000$$

$$\div \text{ by } 1000 = 16 : 30 : 72$$

$$\div \text{ by } 2$$

$$= 8 : 15 : 36$$

(22)

$$A \rightarrow 10000 \times 12 = 120000$$

$$B \rightarrow 5000 \times 8 = 40000$$

$$C \rightarrow 10000 \times 4 = 40000$$

$$\text{Ratio} = 120K : 40K : 40K$$

$$\div \text{ by } 40K$$

$$= 3 : 1 : 1$$

(23)

$$A \rightarrow 1^{st} \text{ 6 months } = 5000 \times 6 = 3000$$

$$\text{after 6 months } = 3000 \times 6 = 18000$$

$$\text{Total} = 48000$$

$$B \rightarrow 1^{st} \text{ 6 months } = 7000 \times 6 = 42000$$

$$\text{after 6 months } = 10000 \times 6 = 60000$$

$$\text{Total} = 102000$$

$$\text{Ratio} = 48000 : 102000$$

$$\div 6K$$

$$= 8 : 17$$



(24)

$$A \rightarrow 5000 \times 12 = 60000$$

$$B \rightarrow 7000 \times 8 = 56000$$

$$C \rightarrow 9000 \times 4 = 36000$$

$$\text{ratio} = 60 : 56 : 36$$

$$\div 4$$

$$= 15 : 14 : 9$$

$$\text{Total} = 15 + 14 + 9 = 38$$

$$A = \left( \frac{15}{38} \right) \times 6600 = 2605.26$$

$$B = \left( \frac{14}{38} \right) \times 6600 = 2431.58$$

$$C = \left( \frac{9}{38} \right) \times 6600 = 1568.16$$

(25)

$$A \rightarrow 6000 \times 6 = 36000$$

$$B \rightarrow 8000 \times 4 = 32000$$

$$C \rightarrow 4000 \times 12 = 48000$$

$$\text{ratio} = 36 : 32 : 48$$

$$\div \text{by } 8$$

$$= 9 : 8 : 12$$

$$= 9 + 8 + 12 = 29$$

$$A = \left( \frac{9}{29} \right) \times 10000 = 3103.45$$

$$B = \left( \frac{8}{29} \right) \times 10000 = 2758.62$$

$$C = \left( \frac{12}{29} \right) \times 10000 = 4137.93$$