

## Aptitude

① Ravi & Rahul

~~Given~~ 3:2

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

$$\text{slices} = \frac{10}{5} = 2$$

$$\text{Rahul} = 2 \times 2 = 4$$

$$\text{Ravi} = 3 \times 2 = 6$$

Rahul  $\Rightarrow$  4, Ravi  $\Rightarrow$  6.

② ratio  $\Rightarrow$  1:4

$$\text{Total } 1+4 = 5$$

$$\text{Amount/pmt} = \frac{100}{5} = 20$$

$$\text{Anu} \Rightarrow 1 \times 20 = 20$$

$$\text{Tina} \Rightarrow 4 \times 20 = 80$$

Anu  $\Rightarrow$  20, Tina  $\Rightarrow$  80

③ Meena  $\Rightarrow$  3000, Sara  $\Rightarrow$  6000

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

$$3:6$$

$$1:2$$

Ratio = 1:2

④ Rihu  $\Rightarrow$  2 cups of milk  
3 cups of water.  
ratio = ?

$$\text{Total sol}^{\prime} = 2+3=5$$

$$(\text{milk : total}) 2:5$$

$$\boxed{\text{Ratio} = 2:5}$$

⑤ Ages of 2 bro's  $\Rightarrow 3:2$

$$\text{elder} \Rightarrow 15 \text{y}$$

$$\text{younger} \Rightarrow ?$$

$$\text{Elder's part} \Rightarrow 3$$

$$\text{years per part} \Rightarrow 15/3 = 5$$

$$\text{younger} \Rightarrow \frac{x+y}{2 \times 5} = 10$$

$$\boxed{\text{younger} = 10y}$$

⑥ 60 chocolate b/w chmit, Raj.

$$\text{Ratio} = 2:1$$

$$\text{Total} = 2+1=3$$

$$\text{Chocol part} = \frac{20}{60/3} = 20$$

$$\cancel{20} = 40$$

$$2 \times 20 \text{ for one} = 40$$

Other will get  $\Rightarrow 1 \times 20 = 20$  chocolates  
 Amit  $\Rightarrow 40$  Raj  $\Rightarrow$  ~~40~~ 40  
 Raj  $\Rightarrow 20$  Amit  $\Rightarrow 20$

⑦ 5 pens  $\rightarrow 80$   
 8 pens  $\rightarrow ?$   
 $8x = 80 \times 8$   
 $x = 80$

⑧ Car  $\rightarrow 120 \text{ km} / 2 \text{ hr}$ .  
 '5 hours  $\rightarrow ?$

$$S = \frac{d}{t}$$

$$S = \frac{120}{2} = 60 \text{ km/hr}$$

$$d = 60 \times 5 = 300 \text{ km}$$

distance = 300 km

⑨ Sugar to flour is 1:4  $\Rightarrow$  1kg ka hisaab  
 g  $\Rightarrow 1000 \text{ g} / 4 = 250 \text{ g}$ .  
 sugar wed  $\Rightarrow 1 \times 250$ .  
 $= 250 \text{ g}$

Sugar  $\Rightarrow 250 \text{ g}$   $\oplus 0.25 \text{ kg}$

~~250~~  
1000

⑩ 12 oranges  $\rightarrow$  ₹60  
150  $\Rightarrow$  ?

~~₹150 for 12 oranges~~  $\Rightarrow$  ₹ $x$

$$\text{cost/orange} = 60/12 = 5.$$

₹150 for 5:

$$150/5 = 30$$

Oranges  $\Rightarrow$  30

⑪ 6000  $\rightarrow$  2 Sons

12 & 15

share of each: ?

Agri  $\Rightarrow$  12:15

ratio  $\Rightarrow$  4:5

Total = 4+5= 9.

~~6000/9 = 3333~~

$$6000/9 = 666.67$$

$$\text{Son 1} \Rightarrow 4 \times 666.67 = 2666.68$$

$$\text{Son 1} \Rightarrow 4 * 666.67 = 2666.68$$

$$\text{Son 2} \Rightarrow 5 * 666.67 = 3333.35$$

$$\text{Son 1} = ₹ 2666.68$$

$$\text{Son 2} = ₹ 3333.35$$

(12) Total  $\Rightarrow 3+2+1 = 6$

$$\text{amount / part} \Rightarrow \frac{12000}{6} = 2000$$

$$A's = 3 * 2000 = 6000$$

$$B's = 2 * 2000 = 4000$$

$$C's = 1 * 2000 = 2000$$

(13) Ratio = 7:3

$$\text{Total} = 10l$$

$$\text{Milk} = \frac{7}{10} + 1^{\circ}$$

7l

(14) Ratio  $x:y:z$

$$6:6:7$$

where  $y = £60,000$

$$\begin{aligned} z &= \frac{7}{6} \times 60000 \\ &= \underline{\underline{£70,000}} \end{aligned}$$

$$\boxed{z = £70,000}$$

(15) Speed ratio = 3:4

$$1^{\text{st}} \text{ person distance} = 18 \text{ km}$$

$$\begin{aligned} 2^{\text{nd}} \text{ person distance} &= \left(\frac{4}{3}\right) \times 18 \\ &= \underline{\underline{24 \text{ km}}} \end{aligned}$$

(16) 60% alc + 40% H<sub>2</sub>O  $\Rightarrow$  5 l.

2 l water

Want 50% water + add  $x$  l water

$$\Rightarrow (2+x)/(5+x) = 0.5$$

$$x = 1 \text{ l}$$

(17) Ratio = 5000 x 6 : 3000 x 6

$$\Rightarrow 30000 : 18000 = 5:3$$

$$= 2400 \times \left(\frac{5}{8}\right) = ₹ 1500, =$$

$$\therefore 24,00 \times \left(\frac{3}{8}\right)$$

$\Rightarrow ₹ 900$

(18)  $A \Rightarrow ₹ 6000 \times 12$

$B \Rightarrow ₹ 9000 \times 12.$

$C \Rightarrow ₹ 3000 \times 8 = ₹ 24000.$

$108000 = ₹ 24000$

6 : 9 : 2.

Total  $\Rightarrow$  1 part  $\rightarrow C's$  share  $= \left(\frac{2}{17}\right) \times 18k$

Total = ₹ 211.76

(19)  $A = ₹ 2000 \times 12 = ₹ 24000$

$B = ₹ 3000 \times 9 = ₹ 27000$

Ratio = 8 : 9.

(20) Ratio = 2 : 3 : 5  $\rightarrow$  total = 10 parts

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

$\Rightarrow ₹ 3000$

$$(21) \quad A = ₹ 4000 \times 4 = 16000$$

$$B = ₹ 5000 \times 6 = 30000$$

$$C = ₹ 6000 \times 12 = 72000$$

$$\text{Ratio} = 16 : 30 : 72 = 4 : 7.5 : 18 \quad \text{multiply by 2}$$

$$= 8 : 15 : 36$$

$$(22) \quad A = ₹ 10000 \times 12 = 120000$$

$$B = ₹ 5000 \times 8 = 40000$$

$$C = ₹ 10000 \times 4 = 40000$$

$$\text{Ratio} = \frac{3}{12} : \frac{1}{4} : \frac{1}{4}$$

$$= 3 : 1 : 1$$

$$(23) \quad A (500 \times 6) + (300 \times 6) = 48000$$

$$B: (7k \times 6) + (10k \times 6)$$

$$= 102000$$

$$\text{Ratio} = 48 : 102 = 8 : 17$$

$$\text{Ratio} = 8 : 17$$

$$A = 25k \times 12 = 60000$$

$$B_1 = 25k \times 12 = 60000$$

$$B_2 = 27k \times 8 = 56000$$

$$C = 29k \times 4 = 36000$$

$$T = 152000$$

$$25k + 27k + 36$$

(24)

$$A = ₹5K \times 12 = 60000$$

$$B_1 = ₹5K \times 12 = 60000$$

$$B_2 = ₹7K \times 8 = 56000$$

$$C = ₹9K \times 4 = 360000$$

$$T = 152000$$

$$A = ₹2605.26$$

$$B = ₹2430.26$$

$$C = ₹1564.47$$

$$\frac{6K + 8K + 36}{152K}$$

=

~~$$A = ₹2605.26$$~~

$$B = ₹2430.26$$

$$C = ₹1564.47$$

(25)

$$A: 6000 \times 60000$$

$$B: 8000 \times 40000$$

$$C: 4000 \times 120000$$

$$T = 116000$$

$$A = \left( \frac{36000}{116000} \times 10000 \right)$$

$$A = \underline{\underline{₹3103.45}}$$

$$B = ₹2758.62$$

$$C = ₹4137.93$$