Solutions

1. (d) Male : Female

$4x \quad : \quad 3x$

$3y \quad : \quad 2y$

$5z \quad : \quad 4z$

Since $2y = 4z$

$$(4x + 3x) + (3y + 2y) + (5z + 4z) = 33$$

$$7x + 19\,z = 33$$

$x = 2$

i.e. No of Female children in A$= 3 \times 2 = 6$

2. (b) $$\frac{\text{Profit of SBI}}{\text{Profit of Airtel}} = \frac{\text{time}\times\text{amount}}{\text{time}\times\text{amount}}$$

$$\frac{6}{17} = \frac{5\times K}{12\times 1275}$$

K = 1080

3. (a) $7 \times 4 + 4 \times 5 + 3 \times 2 = 4536$

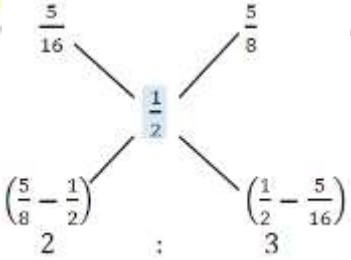
$28 + 20 + 6 = 4536$

$1 = \frac{4536}{54}$

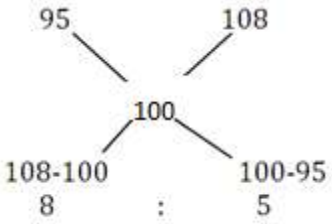
$3 = \frac{4536}{54} \times 20 = 1680$

Share of each woman$= \frac{1680}{5} = 336$

4. (d) By rule of Alligation



5. (a) By rule of Alligation



(8+5) = 182

$1 = \frac{182}{13} = 14$

$8 = 14 \times 8 = 112$

6. (c) $A = \frac{2}{3}B$, $B = \frac{3}{5}C$

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

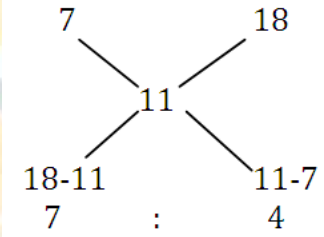
A : B : C = 2 : 3 : 5

(2+3+5)=6940

$(2+3) = \frac{6940}{10} \times 5$

= 3470

7. (b) By rule of Alligation



8. (a) H=S=100

S : G = 100 : 150

H : P = 100 : 200

S : G : P = 100 : 150 : 200

= 2 : 3 : 4

9. (b)Let Income of Anil and Mukesh $2x$ & $3x$

Let expenditure of Mukesh = k &

saving of Anil = k

Let expenditure of Anil $= 2x - k$

$(2x - k) + k = 8000$

$x = 4000$

Total income of A $= (2x + 3x)4000 = 20{,}000$

10. (b)Quantity of Petrol $= \left(2 \times \frac{1}{2} + 3 \times \frac{3}{5} + 1 \times \frac{4}{5}\right)$

$= 1 + 1.8 + 0.8 = 3.6$

Quantity of kerosene$= (2 + 3 + 1) - 3.6 = 2.4$

Required Ratio$= \frac{3.6}{2.4} = 3 : 2$