

$$x\% = \frac{x}{100}$$

$$10\% \text{ of } x = \frac{10x}{100} = \frac{x}{10}$$

$$10\% \uparrow = x + \frac{x}{10} = \frac{11x}{10}$$

$$10\% \uparrow = \frac{110x}{100}$$

$$10\% \downarrow = \frac{90}{100}$$

$$20\% \text{ of } x = \frac{20x}{100} = \frac{x}{5}$$

$$\text{Remaining} = x - \frac{x}{5}$$

$$= \frac{4x}{5}$$

$$= 80\%$$

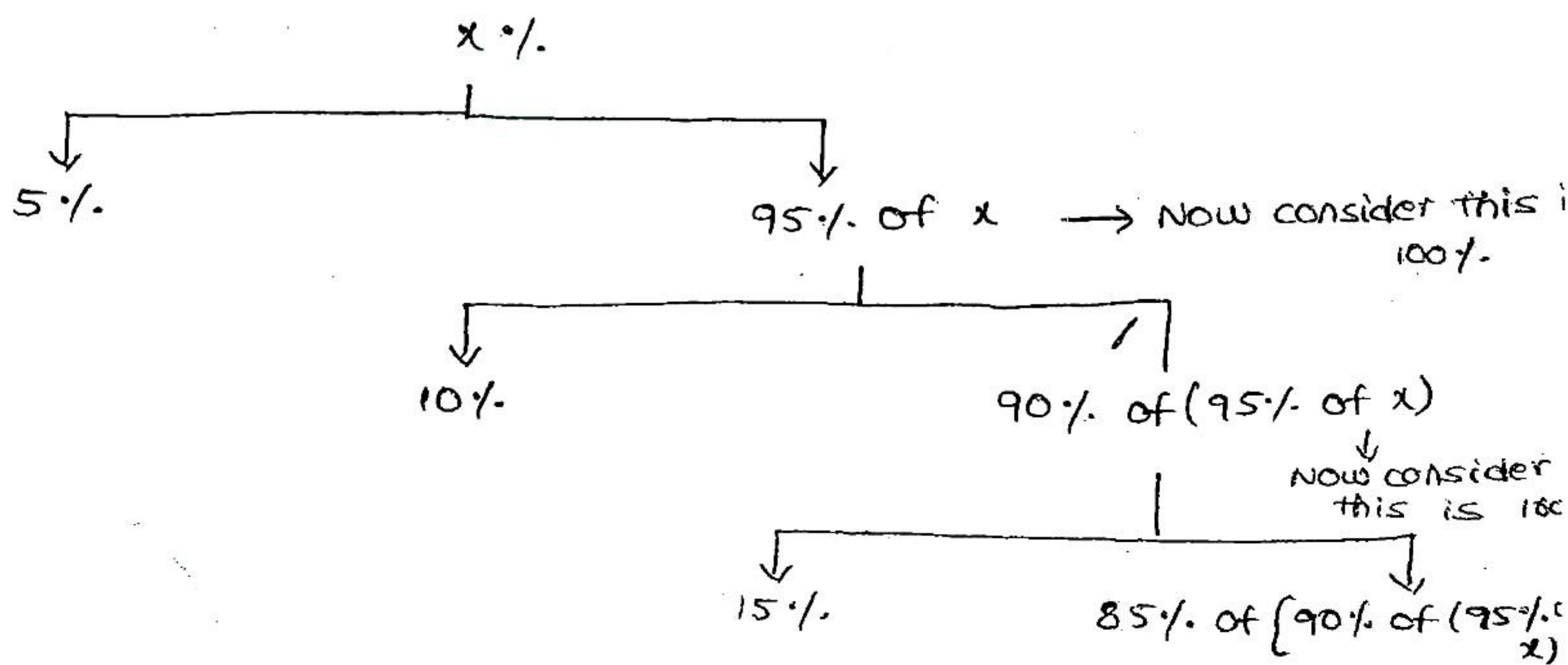
$$R = \frac{80}{100} \times x = \frac{4x}{5}$$

①, 5%, 10%, 15%, 20%, Remaining = ?

$$A \times \frac{95}{100} \times \frac{90}{100} \times \frac{85}{100} \times \frac{80}{100} = \text{Remaining (R)}$$

$$R \times \frac{100}{95} \times \frac{100}{90} \times \frac{100}{85} \times \frac{100}{80} = \text{Actual (A)}$$

$$A > R$$



P.9 No:- 80

1. A → 6%

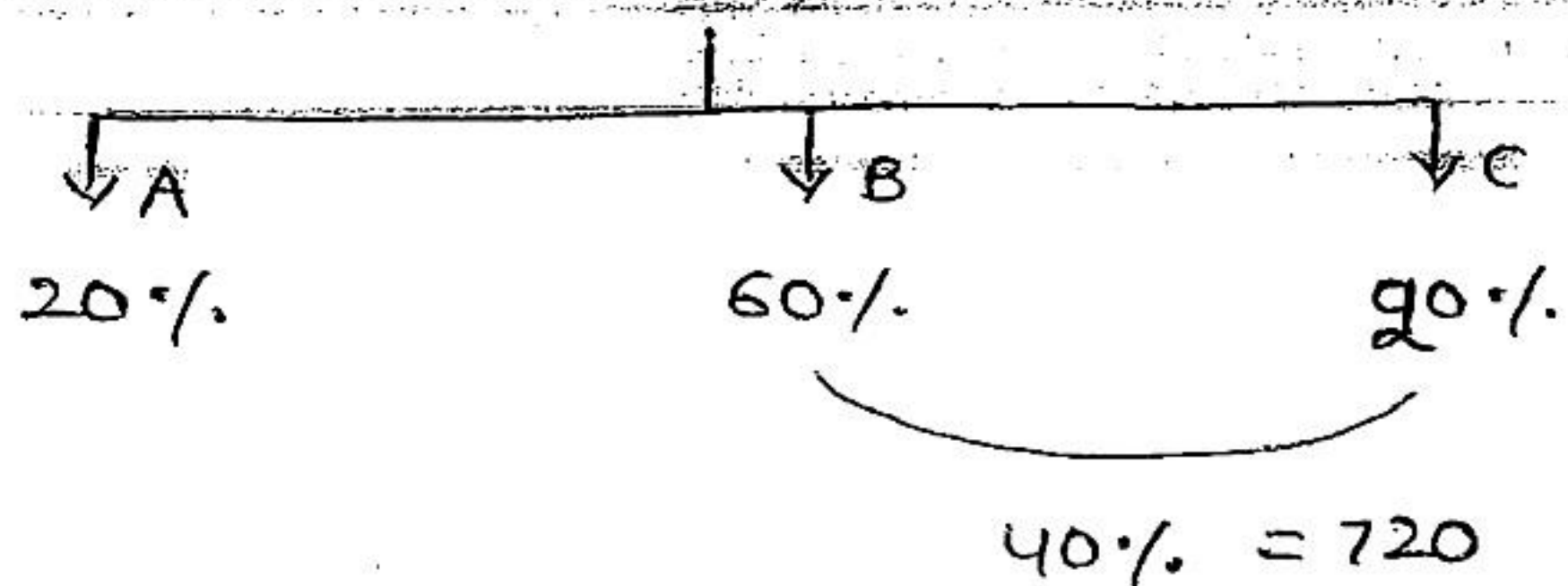
B → 7%

$$1\% = 80 \text{ mem}$$

$$100\% = 100 \times 80$$

$$= 8000 \text{ members.}$$

2.



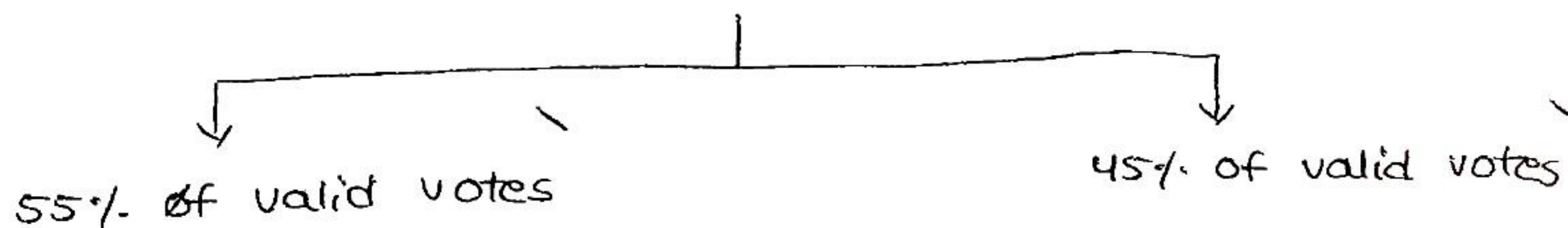
$$1\% = 18$$

$$100\% = 100 \times 18$$

$$= 1800$$

3.

$$100\% \text{ votes} = 7500$$

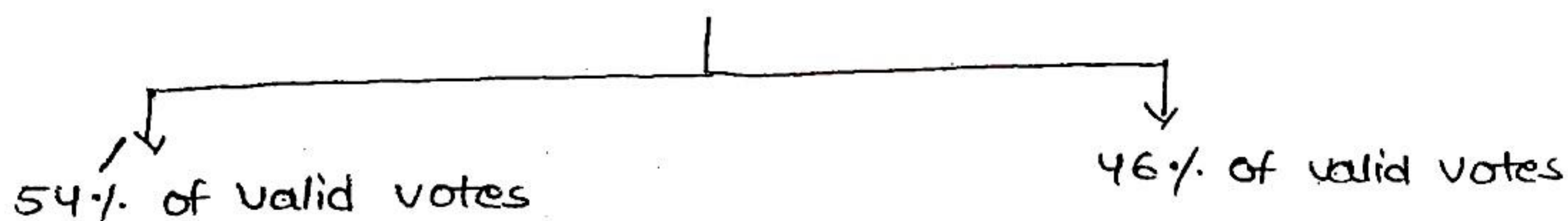


$$\frac{45}{100} \times 7500 \times \frac{80}{100} \quad \text{20% are invalid votes}$$

$$= 2700$$

4.

$$100\% \text{ votes}$$



$$8\% \text{ of valid} = 1620$$

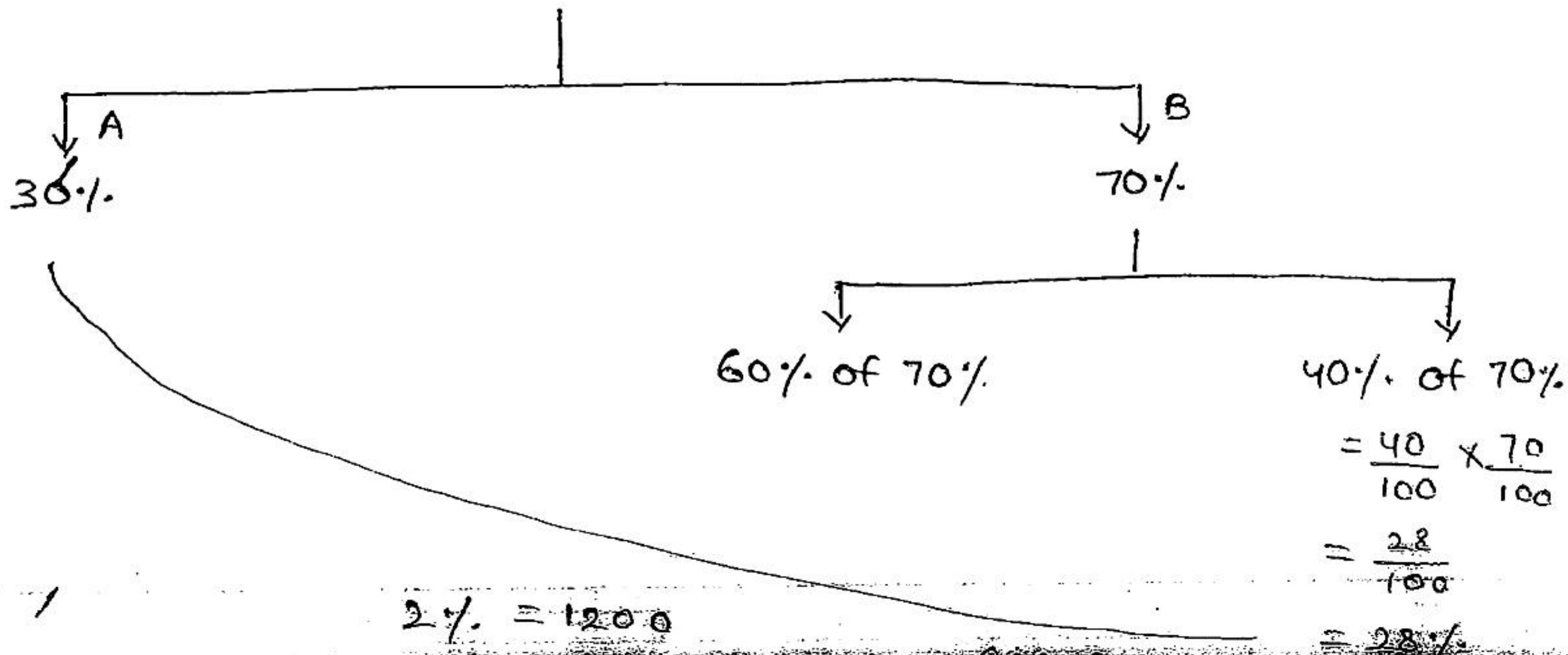
$$\frac{8}{100} \times x \times \frac{90}{100} \times \frac{90}{100} = 1620$$

$$x = \frac{1620 \times 100 \times 100 \times 100}{90 \times 90 \times 8}$$

$$= 25000$$

5.

$$100\% \text{ votes}$$

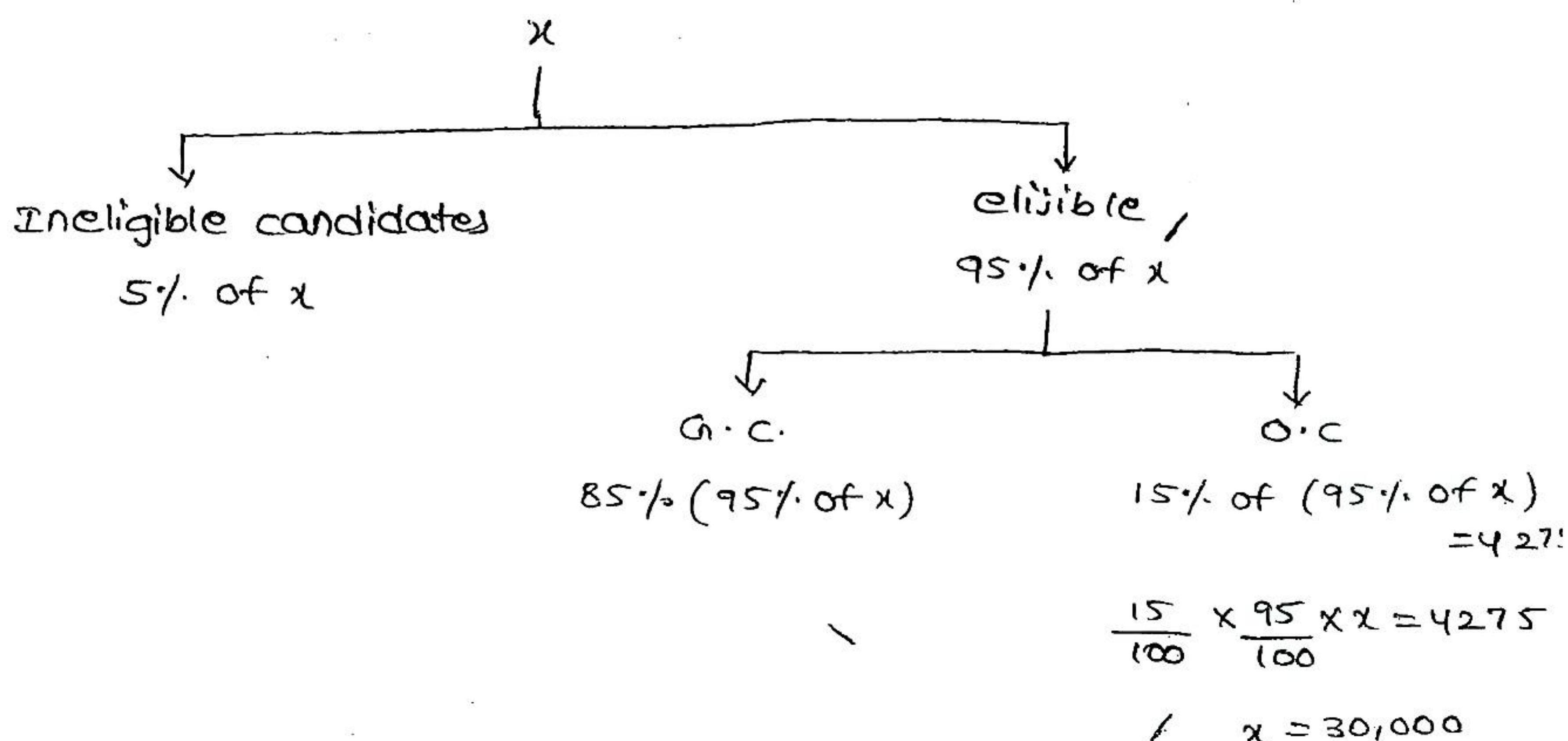


$$= \frac{40}{100} \times \frac{70}{100}$$

$$= \frac{28}{100}$$

$$= 28\%$$

1.



2. He spent 30%, 40%, 50% of 18,400

$$\text{actual amount} \rightarrow 18400 \times \frac{70}{100} \times \frac{60}{100} \times \frac{50}{100} \rightarrow \text{Remaining amount}$$

$$= 3864 \leftarrow \text{saving amount.}$$

3. He spent 10%, 15%, 10%.

$$\text{Remaining} = 1,377$$

$$1,377 \times \frac{100}{90} \times \frac{100}{85} \times \frac{100}{90}$$

$$\text{Actual} = 2000$$

5.

$$\frac{2000}{\text{Investment}} = x$$

$$\text{profit} = 20\% \uparrow$$

$$\text{Income}$$

$$\frac{2001}{\text{Investment}} = (x - 5000)$$

$$\text{Investment} = (x - 5000)$$

$$\text{profit} = 26\% \uparrow$$

$$\text{Income}$$

$$\frac{120}{100} \times x = \frac{126}{100} \times (x - 5000)$$

$$x = 1,05,000$$

7.

$$10,000 \times \frac{110}{100} \times \frac{80}{100} \times \frac{130}{100}$$

$$= 11,440.$$

9.

1000 RS

20% 10%

$$1000 \times \frac{80}{100} \times \frac{90}{100} = 720$$

$$\text{Discount} = 1000 - 720 = 280$$

1000 RS

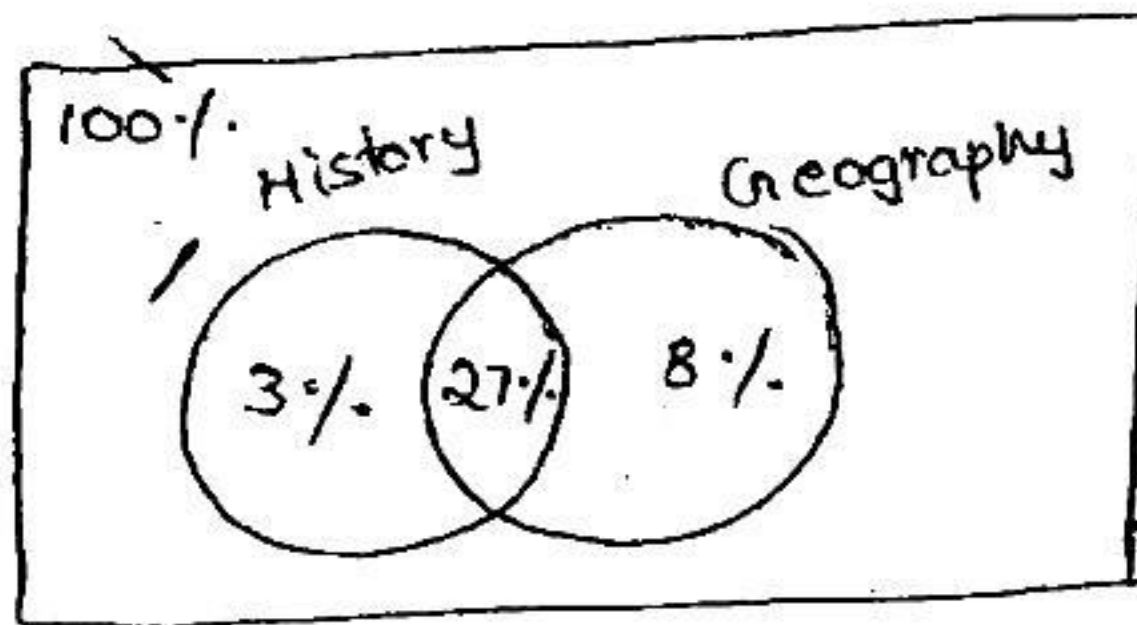
15% 15%

$$1000 \times \frac{85}{100} \times \frac{85}{100} = 722.5$$

$$\text{Discount} = 1000 - 722.5 = 277.50$$

2.50

10.



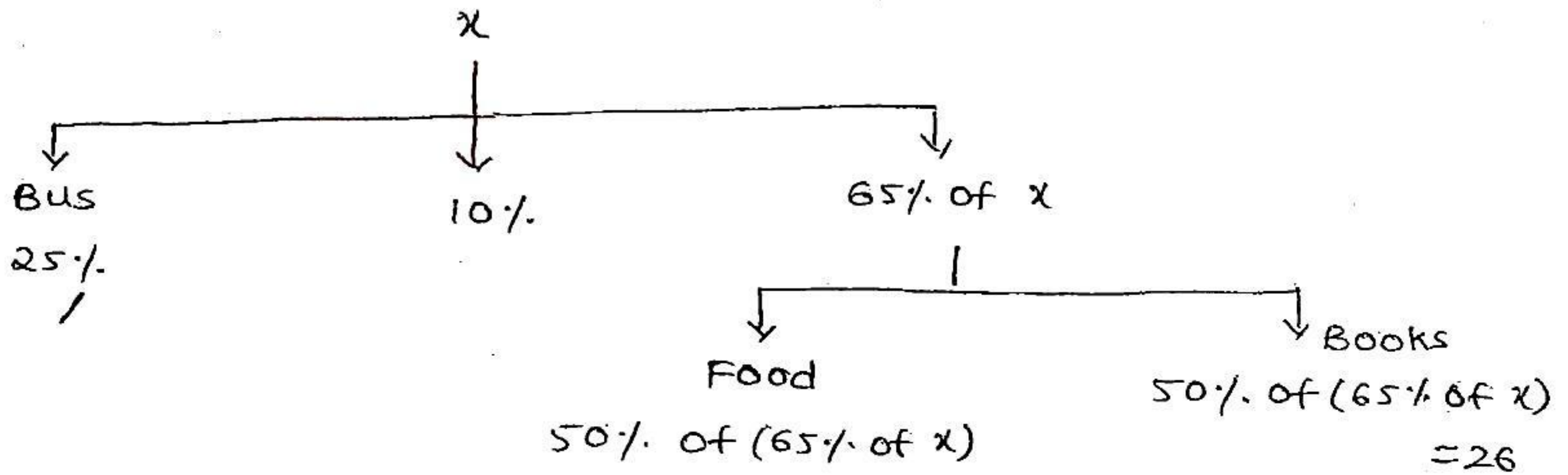
$$\text{passed} = 100\% - (3\% + 27\% + 8\%)$$

$$= 62\% \rightarrow 248$$

$$1\% \rightarrow 4$$

$$100\% \rightarrow 400$$

11.



$$\frac{50}{100} \times \frac{65}{100} \times x = 26$$

$$x = 80 \text{ RS.}$$

12.

$$\begin{array}{ccccccc} 1 & : & 2 & : & 2 \\ 50\% & & 60\% & & 65\% \end{array}$$

$$\frac{1 \times 50 + 2 \times 60 + 2 \times 65}{5} = 60\%$$

15. $(x - \frac{15}{100}x) = 25 \text{ kg}$

$\frac{17x}{20} = 25$

$x = 29.414$

$= 30 \text{ kg}$

No. of cans = $\frac{30}{2} = 15$

Cost = $16 \times 15 = 240$

19. $t + s = 95 \rightarrow \textcircled{1}$

$0.9t + 1.2s = 90 \rightarrow \textcircled{2}$

$1.2t + 1.2s = 114 \rightarrow \textcircled{1} \times 1.2$

$-0.3t = -24$

$t = 80 \text{ RS/-}$

20)

S	D	Total
20	(24-4) 40	60
20% of 20	↑ ↓ 20 nos	40% of 60
= 4 < 25 yr old	= 50% < 25 yr old	= 24 < 25 yr old