

Ex-56

1. (a) $\frac{50}{100} = 50\%$

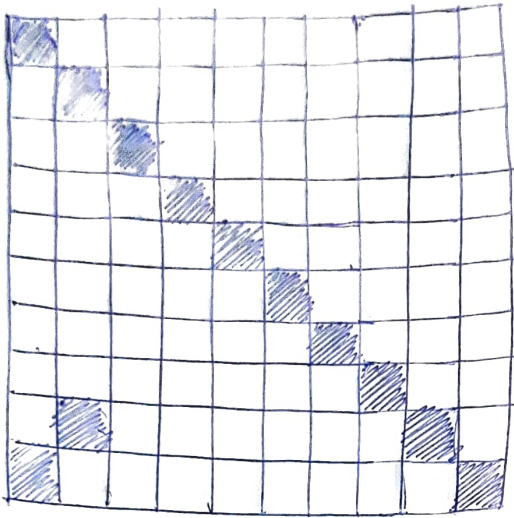
(b) $\frac{10}{100} = 10\%$

(c) $\frac{22}{100} = 22\%$

(d) $\frac{24}{100} = 24\%$

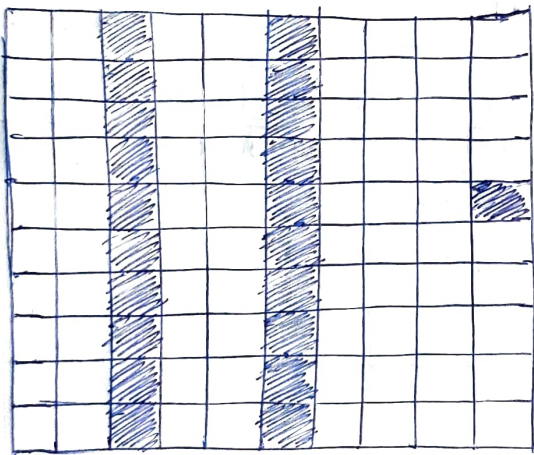
2.

(a)



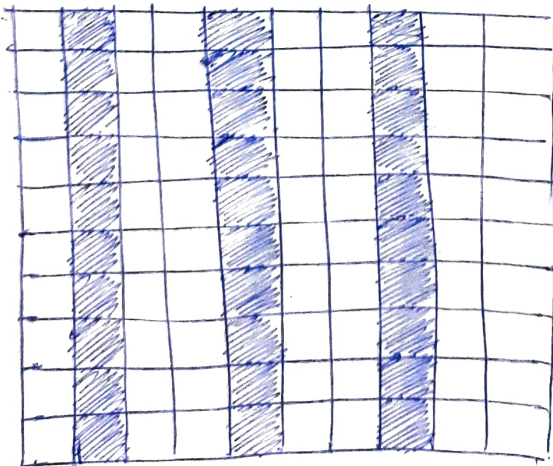
$12\% = \frac{12}{100}$

(b)



$21\% = \frac{21}{100}$

(c)



$30\% = \frac{30}{100}$

3. (a) $10\% = \frac{10}{100}$
 (b) $70\% = \frac{70}{100}$
 (c) $40\% = \frac{40}{100}$

4. (a) $25\% = \frac{25}{100}$ (c) $12\frac{1}{2}\% = \frac{25}{2} \times \frac{1}{100} = \frac{1}{8}$
 (b) $75\% = \frac{75}{100}$ (f) $37.5\% = \frac{37.5}{100}$
 (c) $55\% = \frac{55}{100}$ (g) $8\frac{1}{3}\% = \frac{25}{3} \times \frac{1}{100} = \frac{1}{12}$
 (d) $64\% = \frac{64}{100}$ (h) $62.5\% = \frac{62.5}{100}$

5. (a) $\frac{17}{100} = 17\%$ (b) $\frac{35}{100} = 35\%$ (c) $\frac{25}{100} = 25\%$

6. (a) $\frac{8}{25} = \frac{8}{25} \times 100\% = 32\%$ (e) $\frac{3}{10} = \frac{3}{10} \times 100\% = 30\%$
 (b) $\frac{27}{50} = \frac{27}{50} \times 100\% = 54\%$ (f) $\frac{1}{8} = \frac{1}{8} \times 100\% = 12.5\%$
 (c) $\frac{16}{25} = \frac{16}{25} \times 100\% = 64\%$ (g) $\frac{5}{12} = \frac{5}{12} \times 100\% = 41.66\%$
 (d) $\frac{2}{5} = \frac{2}{5} \times 100\% = 40\%$ (h) $\frac{9}{40} = \frac{9}{40} \times 100\% = 22.5\%$

7. (a) $0.9 = \frac{9}{10} \times 100\% = 90\%$
 (b) $0.08 = \frac{8}{100} \times 100\% = 8\%$
 (c) $0.007 = \frac{7}{1000} \times 100\% = 0.7\%$

8. (a) $8\% = \frac{8}{100} = \frac{2}{25}$ (g) $62.5\% = \frac{62.5}{100} = \frac{125}{200} = \frac{5}{8}$
 (b) $10\% = \frac{10}{100} = \frac{1}{10}$ (h) $37.5\% = \frac{37.5}{100} = \frac{75}{200} = \frac{3}{8}$
 (c) $25\% = \frac{25}{100} = \frac{1}{4}$ (i) $62.5\% = \frac{62.5}{100}$
 (d) $1\% = \frac{1}{100}$ (j) $37.5\% = \frac{37.5}{100}$
 (e) $40\% = \frac{40}{100} = \frac{2}{5}$
 (f) $12\% = \frac{12}{100} = \frac{3}{25}$

9. (a) $0.85 = \frac{85}{100} \times 100\% = 85\%$

(b) $0.41 = \frac{41}{100} \times 100\% = 41\%$

(c) $0.06 = \frac{6}{100} \times 100\% = 6\%$

(d) $0.009 = \frac{9}{1000} \times 100\% = 0.9\%$

10. $0.125 = \frac{125}{1000} \times 100\% = 12.5\%$

\therefore (b) 12.5% is equal to 0.125

11.

(a) 5 paise = 5% of a rupee

(b) 25 paise = 25% of a rupee

(c) 30 cm = 30% of a metre

(d) 6 cm = 6% of a metre

(e) 4 g = 0.4% of a kg

(f) 100 g = 10% of a kg

(g) 40 ml = 4% of a litre

(h) 125 ml = 12.5% of a litre

(i) 9 mm = 90% of a cm

(j) 7 mm = 70% of a cm

(k) 100 m = 10% of a km

(l) 550 m = 55% of a km

12. (a) 40% of $80 = \frac{40}{100} \times 80 = 32$

(b) 13% of $130 = \frac{13}{100} \times 130 = 16.9$

(c) 100% of $50 = \frac{100}{100} \times 50 = 50$

(d) 50% of $100 = \frac{50}{100} \times 100 = 50$

(e) 26% of $250 = \frac{26}{100} \times 250 = 65$

(f) 35% of $180 = \frac{35}{100} \times 180 = 63$

$$12. (g) 25\% \text{ of } \frac{1}{15} = \frac{\overset{5}{25}}{100} \times \frac{1}{15} = \frac{1}{60}$$

$$(h) 65\% \text{ of } \frac{3}{13} = \frac{\overset{5}{65}}{100} \times \frac{3}{13} = \frac{3}{20}$$

$$(i) 16\% \text{ of } \frac{5}{8} = \frac{\overset{2}{16}}{100} \times \frac{5}{8} = \frac{1}{10}$$

$$13. (a) 30\% \text{ of } 30 \text{ kg} = \frac{30}{100} \times 30 = 9 \text{ kg}$$

$$(b) 10\% \text{ of Rs } 400 = \frac{10}{100} \times 400 = \text{Rs. } 40$$

$$(c) 20\% \text{ of Rs. } 35 = \frac{20}{100} \times 35 = \text{Rs. } 7$$

$$(d) 20\% \text{ of } 750 \text{ g} = \frac{20}{100} \times 750 = 150 \text{ g}$$

$$(e) 18\% \text{ of } 350 \text{ m} = \frac{18}{100} \times 350 = 63 \text{ m}$$

$$(f) 12.5\% \text{ of } 24 \text{ ml} = \frac{12.5}{100} \times 24 = 3 \text{ ml}$$

$$14. (a) 10\% \text{ of } 50 = \frac{10}{100} \times 50 = 5$$

$$50\% \text{ of } 8 = \frac{50}{100} \times 8 = 4$$

$\therefore 10\% \text{ of } 50 \text{ is more}$

$$(b) 15\% \text{ of } 300 = \frac{15}{100} \times 300 = 45$$

$$25\% \text{ of } 200 = \frac{25}{100} \times 200 = 50$$

$\therefore 15\% \text{ of } 300 \text{ is more}$

$$(c) 5\% \text{ of } 1000 = \frac{5}{100} \times 1000 = 50$$

$$10\% \text{ of } 600 = \frac{10}{100} \times 600 = 60$$

$\therefore 10\% \text{ of } 600 \text{ is more}$

$$(d) 20\% \text{ of } 450 = \frac{20}{100} \times 450 = 90$$

$$40\% \text{ of } 230 = \frac{40}{100} \times 230 = 92$$

$\therefore 40\% \text{ of } 230 \text{ is more}$

$$15. (a) 10\% \text{ of Rs } 500 = 20\% \text{ of Rs } 250$$

$$\text{or } \frac{10}{100} \times \text{Rs } 500 = \frac{20}{100} \times 250$$

$$\text{or } \text{Rs. } 50 = \text{Rs. } 50 \quad (\text{proved})$$

$$15. (b) 30\% \text{ of } 900 \text{ g} = 90\% \text{ of } 300 \text{ g}$$

$$\text{or } \frac{30}{100} \times 900 \text{ g} = \frac{90}{100} \times 300 \text{ g}$$

$$\text{or } 270 \text{ g} = 270 \text{ g} \quad (\text{proved})$$

$$16. (a) \text{ Let the number is } x.$$

$$x = 18 \times \frac{100}{40}^{10} = 180$$

\therefore The number is 180.

$$(b) \cdot x = \cancel{16} \times \frac{50}{12}^{100} = 50$$

\therefore The number is 50.

$$(c) \cdot x = \text{Rs. } \cancel{15} \times \frac{50}{30}^{100} = \text{Rs. } 50$$

\therefore The amount is Rs. 50.

$$(d) \cdot x = .40 \text{ m} \times \frac{100}{20}^5 = 200 \text{ m}$$

\therefore The length is 200 m.

$$17. (a) x\% = \frac{15}{65} \times 100\% = 20\%$$

\therefore 20% of 65 is 13.

$$(b) \cdot x\% = \frac{1}{3} \times 100\% = 10\%$$

\therefore 10% of 30 is 3.

$$(c) \cdot x\% = \frac{8}{50} \times 100\% = 16\%$$

\therefore 16% of Rs. 50 is Rs. 8.

$$(d) \cdot x\% = \frac{10}{200}^5 \times 100\% = 5\%$$

\therefore 5% of 200 g is 10 g.