Percentage and its Application

Solve the following equations:

1. Find :

(a)ratio of 8m to 16 Km.

(b) Speed of car which is 20m/sec to speed of our which is 72Km/hr.

2. Express as fraction :

(a) 4%

(b)56%

(c)0.08%

3. Convert the following ratios as percentage

$$(a)\frac{27}{4}$$

 $(b)\frac{23}{36}$

(c)0.004

70% of students in a school are boys and the number of girls in the school is 504.
Find the number of boys.

5. The enrollment in a school increases from 1200 to 1254. Determine the percent increase in student enrollment.

6. If 60% of students in a school are boys and total number of girls in the school is 460. Find the number of boys in the school.

7. The annual rate of growth of population of a certain city is 8%. If its present population is 196830, what was the population year ago.

8. Jasmine spends 40% of her salary on food, 25% on house rent, 15% on entertainment and 5% on conveyance. Her savings at the end of the month is Rs. 1200. Find the salary per month.

9. A man buys an article for Rs. 240 and sells it for Rs. 288. Find his gain percent.

10. A radio purchased for Rs.1200 and sold for Rs.1080. Find the loss percent.

11. By selling mathematics book for Rs. 486 a publisher earns a profit of 35%. How much did it cost for the publisher.

12. By selling a silver necklace for Rs. 657 a jeweler loss $8\frac{3}{4}$ % for how much did he purchase

it.

13. By selling 288 hens, A woman lost selling price of 12 hens. Find her loss%

14. Amal sells 2 laptop for Rs. 19550 each gaining 15% on one and losing 15% on the other find her gain or loss% in the whole transaction.

15. Nimra purchased two bags for Rs.750 each. She sold their bags gaining 6% on one bag and losing 4% on the other. Find her loss or gain% in the whole transaction.

16. Find CP (a)when SP=Rs 297.50 gain = $16\frac{2}{3}\%$

(b)SP=Rs 34.40 gain =
$$7\frac{1}{2}\%$$

(c) SP=Rs 2431 loss =
$$6\frac{1}{2}$$
%

17. Find SP when (a)CP= Rs.875 loss = 12%

(b)CP= RS 840 gain = $16\frac{2}{3}$ %

18. Muzammil bought an iron safe for Rs. 5580 and paid Rs. 170 for transportation. Then he sold it for Rs. 6440. Find the gain percent.

19. CP of 12 candles is equal to SP of 15 candles. Find loss%

20. By selling 125 cassettes a man gains an amount equal to the SP of 5 cassettes find gain percent.

21. A grocer bought sugar worth Rs . 4500 . He sold $\frac{1}{3}$ of it at a gain of 10%. At which gain percent must be remaining sugar to be sold to have a gain of 12% on the whole.

22. Danish sold a watch to Girish at a gain of 12% and Girish had to sell it to Jeenish at a loss of 5%. If Jeenish paid Rs. 1330 for it how much did Danish pay for the watch.

23. The MP of a water cooler is Rs. 4650. The shopkeeper offers a discount of 18%. Find its SP.

24.The price of a sweater was slashed from Rs. 960 to Rs. 816 by a shopkeeper in the winter season. Find the rate of discount given by him.

25. Find M if(a)SP= Rs. 528 Discount is 12%

(b)Find SP if MP is RS. 1250 discount is 6%.

Answers :

1. a) ¹ / ₁₂₀₀	2. a) $\frac{1}{25}$	b) <mark>14</mark> 25	c) <mark>1</mark> 1250
2. a)675 %	b)63 <mark>8</mark> 9	c)0.4%	
4. 1176	5.4.5%	6. 690	
5. Rs. 8000	9.20%	10. 10%	
11.4%	12.Rs. 360	13.720	
14.Loss 2 <mark>1</mark> %	CP=17000	Loss = 90	00 CP=2300
15. Gain = 1%	SP = 795	Gain = 15 Cl	P=720
16.a)255	b)Rs. 32	c)Rs.2600	
17.a)Rs. 770	b)980	18)12% 19)20%
20)4 <mark>1</mark> 6%	21)13%	22)1250	23)3813
24)15%	25)a)600	b)1175	