(www.tiwariacademy.com)

(Chapter – 8) (Comparing Quantities) (Class – VII)

Exercise 8.2

 $\frac{2}{7}$

Question 1:

Convert the given fractional numbers to percent:

(a)
$$\frac{1}{8}$$
 (b) $\frac{5}{4}$ (c) $\frac{3}{40}$ (d)
Answer 1:
(a) $\frac{1}{8} = \frac{1}{8} \times 100\% = \frac{25}{2}\% = 12.5\%$
(b) $\frac{5}{4} = \frac{5}{4} \times 100\% = 5 \times 25\% = 125\%$
(c) $\frac{3}{40} = \frac{3}{40} \times 100\% = \frac{3}{2} \times 5\% = \frac{15}{2}\% = 7.5\%$
(d) $\frac{2}{7} = \frac{2}{7} \times 100\% = \frac{200}{7}\% = 28\frac{4}{7}\%$



Question 2:

Convert the given decimal fractions to per cents: (a) 0.65 (b) 2.1 (c) 0.02 (d) 12.35

Answer 2:

(a)
$$0.65 = \frac{65}{100} \times 100\% = 65\%$$

(b) $2.1 = \frac{2.1}{100} \times 100\% = 210\%$

(c)
$$0.02 = \frac{2}{100} \times 100\% = 2\%$$

$$\frac{100}{100} \times 100\%$$

(b)
$$12.35 = \frac{12.35}{100} \times 100\% = 1235\%$$



www.tiwariacademy.com A Free web support in Education

(www.tiwariacademy.com)

(Chapter – 8) (Comparing Quantities) (Class – VII)

Question 3:

Estimate what part of the figures is coloured and hence find the percent which is coloured.



Answer 3:

(i) Coloured part =
$$\frac{1}{4}$$

 \therefore Percent of coloured part = $\frac{1}{4} \times 100\% = 25\%$
(ii) Coloured part = $\frac{3}{5}$
 \therefore Percent of coloured part = $\frac{3}{5} \times 100\% = 60\%$
(iii) Coloured part = $\frac{3}{8}$
 \therefore Percent of coloured part = $\frac{3}{8} \times 100\% = \frac{3}{2} \times 25\%$
 $= 37.5\%$







Question 4:

Find:

(a) 15% of 250	(b) 1% of 1 hour
(c) 20% of ₹2500	(d) 75% of 1 kg

Answer 4:

(a) 15% of 250 =
$$\frac{15}{100} \times 250 = 15 \times 2.5 = 37.5$$

(b) 1% of 1 hours = 1% of 60 minutes = 1% of (60 x 60) seconds
= $\frac{1}{100} \times 60 \times 60 = 6 \times 6 = 36$ seconds

www.tiwariacademy.com A Free web support in Education

2

(www.tiwariacademy.com)

(Chapter – 8) (Comparing Quantities) (Class – VII)

(c) 20% of ₹2500 =
$$\frac{20}{100}$$
 × 2500 = 20 x 25 = ₹ 500
(d) 75% of 1 kg = 75% of 1000 g = $\frac{75}{100}$ × 1000 = 750 g = 0.750 kg

Question 5:

Find the whole quantity if:

- (a) 5% of it is 600
- (c) 40% of it is 500 km
- (e) 8% of it is 40 litres

(b) 12% of it is ₹1080(d) 70% of it is 14 minutes

Answer 5:

Let the whole quantity be x in given questions:

(a) 5% of
$$x = 600$$

$$\Rightarrow \frac{5}{100} \times x = 600$$

$$\Rightarrow x = \frac{600 \times 100}{5} = 12,000$$
(b) 12% of $x = ₹1080$

$$\Rightarrow \frac{12}{100} \times x = 1080$$

$$\Rightarrow x = \frac{1080 \times 100}{12} = ₹9,000$$
(c) 40% of $x = 500$ km

$$\Rightarrow \frac{40}{100} \times x = 500$$

$$\Rightarrow x = \frac{500 \times 100}{40} = 1,250$$
 km
(d) 70% of $x = 14$ minutes

$$\Rightarrow \frac{70}{100} \times x = 14$$

$$\Rightarrow x = \frac{14 \times 100}{70} = 20$$
 minutes
(e) 8% of $x = 40$ litres

$$\Rightarrow \frac{8}{100} \times x = 40$$

$$\Rightarrow x = \frac{40 \times 100}{8} = 500$$
 litres
3
Www.tiwariacademy.com
A Free web support in Education

(www.tiwariacademy.com)

(Chapter – 8) (Comparing Quantities) (Class – VII)

Question 6:

Convert given per cents to decimal fractions and also to fractions in simplest forms:					
(a) 2	25%	(b) 150%	(c) 20%	(d) 5%	
Example Answer 6:					
S. No.	Per cents	Fractions	Simplest form	Decimal form	
(a)	25%	25	1	0.25	
		100	4		
(b)	150%	150	3	1.5	
		100	2		
(c)	20%	20	<u>1</u>	0.2	
		100	5		
(d)	5%	5	1	0.05	
		100	20		

Question 7:

In a city, 30% are females, 40% are males and remaining are children. What percent are children?

Answer 7:

Given: Percentage of females = 30%

Percentage of males = 40%

Total percentage of females and males = 30 + 40 = 70%

Percentage of children = Total percentage – Percentage of males and females

= 100% - 70%

= 30%

Hence, 30% are children.

Question 8:

Out of 15,000 voters in a constituency, 60% voted. Find the percentage of voters who did not vote. Can you now find how many actually did not vote?

Answer 8:

Total voters = 15,000Percentage of voted candidates = 60%Percentage of not voted candidates = 100 - 60 = 40%Actual candidates, who did not vote = 40% of 15000

 $=\frac{40}{100}\times15000=6,000$

Hence, 6,000 candidates did not vote.



A Free web support in Education

(www.tiwariacademy.com)

(Chapter – 8) (Comparing Quantities) (Class – VII)

Question 9:

Meeta saves ₹ 400 from her salary. If this is 10% of her salary. What is her salary?

Answer 9:

Let Meera's salary be ₹ *x*.

Now, 10% of salary = ₹400

$$\Rightarrow \qquad 10\% \text{ of } x = ₹ 400$$

 $\Rightarrow \qquad \frac{10}{100} \times x = 400$ $\Rightarrow \qquad x = \frac{400 \times 100}{10}$

$$\Rightarrow \qquad x = 4.000$$

Hence, Meera's salary is ₹ 4,000.

Question 10:

A local cricket team played 20 matches in one season. It won 25% of them. How many matches did they win?

Answer 10:

Number of matches played by cricket team = 20 Percentage of won matches = 25% Total matches won by them = 25% of 20 = $\frac{25}{100} \times 20$ = 5

Hence, they won 5 matches.



www.tiwariacademy.com A Free web support in Education