

Class - VII - C

Subject - Mathematics

Chapter - Commercial Mathematics

Ex - 8.3

Percentage means per hundred or out of hundred.
Percentage is a fraction with denominator 100.

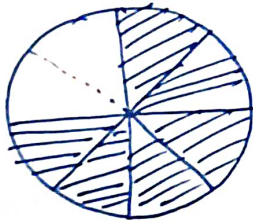
Formulae :-

To convert fraction into percent \rightarrow We simply multiply the fractions by 100 and put the % sign.

To convert a percent into fractions \rightarrow Divide the number by 100 and drop the % sign.

1. What percentage of the following figures is shaded?

(a)



Shaded blocks = 6

Total blocks = 8

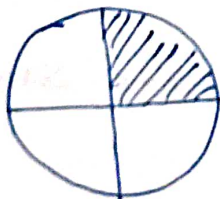
\therefore percentage of shaded portion

$$\frac{6}{8} \times 100$$

$$= \frac{3}{4} \times 100 \quad (\text{divided by } 2)$$

$$\therefore 3 \times 25 = 75\%$$

(d)



shaded block = 1

Total blocks = 4

$$\text{Percentage of shaded portion} = \frac{1}{4} \times 100$$
$$= 25\%$$

2. Convert the following into fractions:-

(a) 10%

$$= \frac{10}{100}$$

$$= \frac{1}{10}$$

(c) 50%

$$= \frac{50}{100}$$

$$= \frac{1}{2}$$

(e) 150%

$$= \frac{150}{100}$$

$$= \frac{3}{2}$$

do question (b) and (d) by yourself.

3. Convert the following into percentage:-

3(a)

$$\frac{1}{4}$$

$$= \frac{1}{4} \times 100^{25}$$

$$= 1 \times 25$$

$$= 25\%$$

(c) $\frac{3}{4} \times 100^{25}$

$$= 3 \times 25$$

$$= 75\%$$

(e)

$$2\frac{3}{5}$$

$$= \frac{13}{5} \times 100^{20}$$

$$= 13 \times 20$$

$$= 260\%$$

do question (b) and (d) in your maths notebook

4. Convert the following in ratios in the simplest form.

(a) 2.5%

$$= \frac{2.5}{100}$$

to remove decimal we will multiply numerator and denominator by 10.

$$= \frac{2.5 \times 10}{100 \times 10}$$

$$= \frac{25}{1000}$$

⇒ reducing the above fraction in lowest term

$$= \frac{\cancel{25}^5}{\frac{1000}{\cancel{200}^4}} = \frac{5}{40}$$

(dividing numerator and denominator by 5)

$$= \frac{1}{40}$$

$$= 1:40$$

(c) 82%

$$= \frac{82}{100}$$

$$= \frac{82 \div 2}{100 \div 2}$$

(dividing by 2)

$$= \frac{41}{50}$$

$$= 41:50$$