



STEPPING STONE  
SCHOOL (HIGH)

**CLASS: 7**

**Subject: Mathematics**

**Date: 09/05/2020.**

**Topic: Percentage**

**Time Limit: 30 min.**

***Worksheet No. :15***

*[Copy the questions and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]*

***Per cent means per hundred. The symbol for per centage is %***

***Per means 'out of' or 'for every' & cent means 'hundred'***

$$\frac{x}{n} \times 100 = p$$

*where:*

***x*** = *given quantity*

***n*** = *total amount*

***p*** = *percentage of the quantity  
compared to the total*

**For example : If Ravi secured 95 marks out of 100, we say he has secured 95 percent marks.**

**Working- Rule:-**

- i. In order to convert a fraction into percentage, multiply the fraction by 100 and put the percent sign '%' to obtain required percentage.**

**i.e.- Percentage of  $\frac{x}{y} = (\frac{x}{y} \times 100)\%$**

- ii. To convert a percentage into a fraction, write  $\frac{1}{100}$  in the place of % sign and reduce fraction to simplest form ( or lowest form )

### Illustrative Example

**Q1. Find 15% of 250**

**Solution:** 15 % of 250 =  $\left[ \frac{15}{100} \times 250 \right] = \frac{75}{2} = 37.5$

**Q2. Find the whole quantity, If 8 percent of it is 40 litres.**

**Solution:** Let the whole quantity be x, then

**8% of x = 40 litres**

$$\frac{8}{100} \times x = 40 \text{ litres} \rightarrow \therefore x = \left[ 40 \times \frac{100}{8} \right] = 5 \times 100 = 500 \text{ litres}$$

**Q3. Sita saves Rs400 from her salary. If this is 10% of her salary, what is her salary?**

**Solution.** Let Rohan's salary be RsX. Then,

10% of Rs X = Rs 400

$$\frac{10}{100} \times X = 400 \rightarrow \frac{1}{10} \times X = 400 \text{ or } X = ( 10 \times 400 ) = 4000$$

**Rohan's salary is Rs4000.**

**Q4. Express the following percent to decimal fractions and also to fractions in the simplest form:  $12\frac{1}{2}\%$**

|                  |                     |                    |     |                                     |     |                                  |     |               |     |              |
|------------------|---------------------|--------------------|-----|-------------------------------------|-----|----------------------------------|-----|---------------|-----|--------------|
| <b>Solution.</b> | $12\frac{1}{2}\% =$ | $\frac{25/2}{100}$ | $=$ | $\frac{25}{2} \times \frac{1}{100}$ | $=$ | $\frac{1}{2} \times \frac{1}{4}$ | $=$ | $\frac{1}{8}$ | $=$ | <b>0.125</b> |
|                  | <b>Step 1</b>       |                    |     | <b>Step 2</b>                       |     | <b>Step 3</b>                    |     | <b>Step 4</b> |     | <b>Ans.</b>  |

### Questions for practice

**Q1. Convert the following fraction into percentages:**

i.  $\frac{1}{3}$       ii.  $1\frac{3}{8}$       iii.  $\frac{27}{100}$

**Q2. Convert the following per cents to fraction in simplest form.**

i. 21.3%      ii. 375%      iii.  $3\frac{1}{8}\%$

**Q3. Find:**

- i. 1% of 1 hour      ii. 25% of 400      iii.  $6\frac{1}{4}\%$  of 12kg

**Q4. Find the whole quantity, If**

- i. 12% of it is Rs 1080  
ii. 40% of it is 500 km

**Q5. In a city, 30% are female, 40% are male and remaining are children. What percent are children?**

**Q6. In a class of 40 students 25% liked playing football. How many students like playing football?**

**Q7. In a class of 60 students, 30% are boys. Find the number of girls in the class.**

**Q8. 25% of a number is 120. Find the number.**

**Q9. 32% of the teacher in the school are female and the number of male teacher is 85.find the total number of teacher in the school.**

**Q10. Monika saves Rs800 from her salary. If this is 10% of her salary, what is her salary?**

[Click here for you tube link on percentage](#)