

Grade IX
Mathematics – Chapter I

I. Are the following statements true or false? Give reasons for your answers.

1. Every whole number is a natural number. Solution. False, because [$\because N=1,2,3,4,\dots$].
0 is a whole number but not a natural number. [$\because W=0,1,2,3,4,\dots$]

2. Every integer is rational number.

True, because every integer can be expressed in the form of $\frac{P}{1}$; [$\because 3=\frac{3}{1}, 5=\frac{5}{1}, 8=\frac{8}{1}$]

where 'P' is an integer. So an integer is a rational number.

3. Every rational number is an integer.

False because $\frac{3}{7}, \frac{2}{5}, \frac{3}{5}, \frac{7}{9} \dots$ are not integers.

II. Write 5 rational numbers between 1 and 2.

Solution : Since we want to write five numbers, we write 1 and 2 as rational with denominator 5 + 1 is $\frac{6}{6} = 1, \frac{12}{6} = 2$; [\because between 1 and 2 means greater than 1 and less

than 2]. So the five rational numbers are $\frac{7}{6}, \frac{8}{6}, \frac{9}{6}, \frac{10}{6}, \frac{11}{6}$.

Home Work.

1. Find six rational number between 3 and 4.

2. Write five rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$.