Recapitulation of Rational Numbers

A. Write the Missing Terms to Complete the Sentences:

1. Every point on the number line corresponds to a ..... number which may be either ..... or .....
2. 0 is a/an ..... Number.
3. The decimal equivalent to $\frac{7}{12}$ is.....
4. Zero has _____ reciprocal.
5. The numbers_____ and _____ are their own reciprocals.
6. The reciprocal of – 5 is _____.

B. Define of given following

Rational Number:

Fractional Number:

Prime Number:

C. Figure out the answers to these questions:

1. The rational number that does not have a reciprocal.
2. The rational numbers that are equal to their reciprocals.
3. The rational number that is equal to its negative.

D. Mark each sentence with a True (✔) or False (✘):

1. The sum of two rational numbers is rational. ☐
2. The sum of two irrational numbers is irrational ☐
3. The product of two rational numbers is rational. ☐
4. $\sqrt{2}$ is irrational and $\frac{22}{7}$ is rational. ☐
5. Every rational number must be a whole number. ☐

E. Challenge yourself with these questions:

1. Represent these numbers on the number line.

(a) $\frac{7}{4}$ (b) $\frac{-5}{7}$

2. Represent $\frac{-2}{11}$, $\frac{-5}{11}$, $\frac{-9}{11}$ on the number line

3. Represent $\frac{13}{3}$ and $-\frac{13}{3}$ on number line.

4. Represent the rational number $\frac{7}{4}$ on the number line.

5. Draw the number line and represent the following rational numbers on it.

   (a) $\frac{3}{8}$ (b) $-\frac{5}{3}$