

Reciprocal of a Fraction

If a given fraction is flipped upside down the new fraction is called the reciprocal of the given fraction. For example,

Reciprocal of $\frac{3}{5}$ is $\frac{5}{3}$ and reciprocal of $\frac{5}{6}$ is $\frac{6}{5}$

Reciprocal of $\frac{1}{4}$ is $\frac{4}{1}$ Or 4 and reciprocal of $\frac{1}{12}$ is $\frac{12}{1}$ Or 12

Remember that reciprocal of a whole number is 1 over that number.

For example,

Reciprocal of 6 is $\frac{1}{6}$ and reciprocal of 15 is $\frac{1}{15}$

Reciprocal of 1 is $\frac{1}{1}$ Which is again equal to 1.

To find the reciprocal of a mixed number, change it into improper fraction and then find the reciprocal of the improper fraction. For example,

To find reciprocal of $6\frac{3}{5}$ change it to improper fraction as $\frac{33}{5}$
and then find the reciprocal of $\frac{33}{5}$ which is $\frac{5}{33}$

Reciprocal of $2\frac{4}{7}$ is $\frac{7}{18}$

When a fraction is multiplied by its reciprocal, then you get 1 as the answer.

For example the reciprocal of $\frac{3}{5}$ is $\frac{5}{3}$ Let's multiply these fractions,

$$\frac{\overset{1}{\cancel{3}}}{\underset{1}{\cancel{5}}} \times \frac{\overset{5}{\cancel{5}^1}}{\underset{1}{\cancel{3}_1}} = \frac{1 \times 1}{1 \times 1} = \frac{1}{1} = 1$$