Fraction as Decimal

To convert a common fraction into decimal, we have to follow the following steps.

Step 1: Change the given common fraction into an equivalent fraction whose denominators is 10 or 100 or 1000, etc.

Step 2: Count the number of zeroes in the denominator after 1.

Step 3: In the numerator, start from the extreme right and move the decimal point to the left by the number of zeroes seen in step 2.

Let us understand with an example:

Example: Convert $\frac{3}{4}$ into decimals.

Solution:
$$\frac{3}{4} = \frac{3 \times 25}{4 \times 25} = \frac{75}{100} = 0.75$$

Divide the numerator 3 by the denominator 4.

$$\begin{array}{r}
0.75 \\
4 \overline{\smash{\big)}\ 3.00} \\
-28 \\
20 \\
-20 \\
0
\end{array}$$

Thus,
$$\frac{3}{4} = 0.75$$