

Converting Fractions to Decimal Fractions - Part 1

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In the previous segment, we learnt **how to convert decimal fractions to fractions.** In this segment, we will learn how to convert fractions to decimal fractions.

How to Convert fractions to decimal fractions?

A fraction can be converted to its decimal form by the following steps:

- 1. Divide the numerator by the denominator.
- 2. If it does not divide exactly, keep adding zeros to the dividend until the remainder is zero.
- 3. Place the decimal point on the quotient before as many digits as the number of zeros added.
- 4. The number thus obtained is the decimal form of the given fraction.

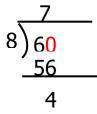
For example,

Q. Convert $\frac{6}{8}$ to its decimal form. Solution

Divide the numerator by the denominator.

6 does not divide exactly into 8. So, add a zero to the dividend.

Now, divide 60 by 8. 8 times 7 is 56. And 60 minus 56 is 4.



The remainder is not zero. So, add another zero to the dividend and get it down, next to 4.



8 times 5 is 40. And 40 minus 40 gives 0.

Since two zeros were added, the decimal form will have 2 decimal places. So, put a decimal point before 2 digits in the quotient, that is 75, to get 0.75.

Thus, $\frac{6}{8} = 0.75$

Summary

What's next?

In the next segment of Class 10 Maths, we will learn how to **convert fractions** with denominators as multiples of tens into decimal forms.