

How to change a fraction into a decimal

Example

Change the fraction $\frac{1}{3}$ into a decimal.

Solution

You have to divide 1 by 3.

1 is smaller than 3, so 3 goes to 1, 0 times.

After the first 0, we put a dot, to separate decimals from the whole part.

We are multiplying 0 by 3, and the result we are putting under 1 digit, after that we'll subtract 0 from 1. The result will be 1.

After that, we are adding to result(after equals) repeating dot. When we are putting decimal result, same time, we are putting a 0 near 1. After that we'll divide 3 by 10. The result will be 3. We are multiplying again, 30, and the 0 we are putting under 10 and then subtracting.

1.000000...3000...00

0.

100...

0...

100...

0...

100...