

## Can I write decimals as fractions?

You need to be able to convert decimals to fractions (and fractions to decimals but that comes in year 6). With a good understanding of the place value of the digits in a decimal, this is quite straightforward. Here's a step-by-step guide ...

Tens	Ones	.	tenths	hundredths	thousandths
	4	.	3	6	8

### Step 1

Look at the place value column your last decimal digit is in - this will give you your denominator.

tenths = /10

hundredths = /100

thousandths = /1000

In the example above, the last decimal digit (8) is in the thousandths column, so our denominator will be /1000.

### Step 2

You can then place the digits in the number as the numerator, ignoring the decimal point. This will give you the answer as an improper fraction:

$$4368/1000$$

### Step 3

To give the answer as a mixed number, only place the digits *after* the decimal point as the numerator. The digits before the decimal point (ones, tens etc), will be written as a whole number:

$$4 \frac{368}{1000}$$

**NOTE:** if the decimal number doesn't have any digits before the decimal point, you can only write it as a proper fraction e.g:

$$0.18 = \frac{18}{100}$$

Answer the questions below to make sure you are able to convert decimals to fractions. If you need more practice, you can always make some up of your own and get a grown up to check your answers!

Decimal	Fraction
1.36	$136/100$ or $1 \frac{36}{100}$
0.2	
41.3	
6.08	
5.634	
9.42	
10.912	
4.8	
0.34	

Decimal	Fraction
1.36	$136/100$ or $1 \frac{36}{100}$
0.2	$2/10$
41.3	$413/10$ or $41 \frac{3}{10}$
6.08	$608/100$ or $6 \frac{8}{100}$
5.634	$5634/1000$ or $5 \frac{634}{1000}$
9.42	$942/100$ or $9 \frac{42}{100}$
10.912	$10912/1000$ or $10 \frac{912}{1000}$
4.8	$48/10$ or $4 \frac{8}{10}$
0.34	$34/100$