

Converting Fractions



Proper Fractions



All these fractions have numerators that are **smaller** than their denominators.

This means that they are all **less than 1**.

They are called **proper fractions** .

$$\frac{1}{2}$$

$$\frac{3}{4}$$

$$\frac{5}{9}$$

$$\frac{25}{40}$$

Can you write down three more different proper fractions?

Improper Fractions



All these fractions have numerators that are **larger** than their denominators.

This means that they are all **more than 1**.

They are called **improper fractions**.

$$\frac{4}{2}$$

$$\frac{10}{4}$$

$$\frac{15}{9}$$

$$\frac{50}{40}$$

Can you write down three more different improper fractions?

Mixed Number Fractions



A **mixed number fraction** is a whole number and a fraction combined into one 'mixed' number.

In a mixed number fraction, the whole number has the same number of parts as the denominator of the fraction.

$$2\frac{3}{4}$$



Improper to Mixed Number



Improper fractions can also be written as a mixed number fraction as they are equivalents.

$$\frac{11}{4}$$

There are eleven parts altogether.

In this fraction, every whole is made of four parts.



We can see that the equivalent mixed number fraction is **two wholes and three parts**.

$$2\frac{3}{4}$$

Think about how many times 4 multiples into 11.



Improper to Mixed Number



Another way to think of this is to divide the numerator (11) by the denominator (4). However many times 4 goes into 11 evenly becomes the whole and the remainder becomes the fraction.

The remainder is

$$\frac{3}{4}$$

$$\frac{11}{4}$$

$$11 \div 4 = 2 \text{ r}3$$

The 2 becomes the
two wholes

$$2\frac{3}{4}$$

Converting Challenge 1



Have a go at changing these improper fractions into their **mixed number equivalents**.

$$2\frac{2}{3}$$

1 2 3

4 5 6

7 8

$$3\frac{1}{2}$$

1 2

3 4

5 6

7

$$1\frac{2}{5}$$

1 2 3 4 5

6 7

Converting Challenge 1



Have a go at changing these improper fractions into their **mixed number equivalents**.

$$\frac{8}{3}$$

$$\frac{7}{2}$$

$$\frac{7}{5}$$

Converting Challenge 1



Have a go at changing these improper fractions into their **mixed number equivalents**.

$$2\frac{2}{3}$$

1	2	3
4	5	6
7	8	

$$3\frac{1}{2}$$

1	2
3	4
5	6
7	

$$1\frac{2}{5}$$

1	2	3	4	5
6	7			

Converting Challenge 2



Have a go at changing these improper fractions into their **mixed number equivalents** .

$$\frac{5}{4}$$

$$\frac{14}{3}$$

$$\frac{9}{6}$$

Converting Challenge 2



Have a go at changing these improper fractions into their **mixed number equivalents** .

$$1\frac{1}{4}$$

$$4\frac{2}{3}$$

$$1\frac{3}{6}$$

Mixed Number to Improper



Mixed number fractions can also be written as an improper fraction as they are equivalents.

In this mixed number, every whole is made of six parts.

$$3\frac{5}{6}$$

In this mixed number, there are five parts of a whole.

$$\frac{23}{6}$$

Think about how many parts there will be altogether if we calculate 3×6 .



Think about how many parts there will be altogether if we add five more parts of a whole.

Mixed Number to Improper



Another way to look at this is to multiply the whole number by the denominator, add the numerator and put the answer over the fraction.

$$3\frac{5}{6}$$

Then add your answer to the numerator:
 $5 + 18 = 23$

$$\frac{23}{6}$$

First multiply the whole number by the denominator:
 $3 \times 6 = 18$

Finally, put your answer (23) over the denominator you are working with (6)

Converting Challenge 3



Have a go at changing these mixed number fractions into their **improper fraction equivalents** .

$$10\frac{1}{3}$$

1	2	3
4	5	6
7		

$$5\frac{1}{2}$$

1	2
3	4
5	

$$23\frac{1}{5}$$

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23		

Converting Challenge 3



Have a go at changing these mixed number fractions into their **improper fraction equivalents**.

$$3\frac{1}{3}$$

$$2\frac{1}{2}$$

$$4\frac{3}{5}$$

Converting Challenge 3



Have a go at changing these mixed number fractions into their **improper fraction equivalents**.

$$10\frac{1}{3}$$

1	2	3
4	5	6
7		

$$5\frac{1}{2}$$

1	2
3	4
5	

$$23\frac{1}{5}$$

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23		

Converting Challenge 4



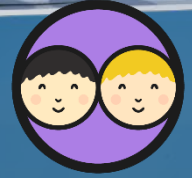
Have a go at changing these mixed number fractions into their **improper fraction equivalents** .

$$1\frac{5}{6}$$

$$3\frac{2}{4}$$

$$4\frac{1}{7}$$

Converting Challenge 4



Have a go at changing these mixed number fractions into their **improper fraction equivalents** .

$$11\frac{1}{6}$$

$$14\frac{1}{4}$$

$$29\frac{1}{7}$$

