

## Converting improper and mixed numbers

To convert an improper fraction to a mixed number you see how many times the denominator goes into the numerator. The remainder is the part of the fraction.

For example

Convert  $\frac{13}{3}$  into a mixed number.

3 goes in to 13 **four** times with **one** left over.  $4\frac{1}{3}$

Convert  $\frac{17}{5}$  into a mixed number.

5 goes in to 17 **three** times with **two** left over.  $3\frac{2}{5}$

### Questions

Convert these improper fractions to mixed numbers

1).  $\frac{11}{2}$   
7).  $\frac{11}{3}$

2).  $\frac{7}{3}$   
8).  $\frac{15}{4}$

3).  $\frac{7}{4}$   
9).  $\frac{21}{2}$

4).  $\frac{13}{2}$   
10).  $\frac{12}{5}$

5).  $\frac{13}{4}$   
11).  $\frac{11}{6}$

6).  $\frac{8}{5}$   
12).  $\frac{22}{5}$

To convert a mixed number to an improper fraction you multiply the whole number by the denominator. This value is added to the numerator.

For example

Convert  $1\frac{2}{3}$  into an improper fraction.

$$1 \times 3 = 3$$

$$2 + 3 = 5 \quad \frac{5}{3}$$

Convert  $3\frac{2}{5}$  into a mixed number.

$$3 \times 5 = 15$$

$$2 + 15 = 17 \quad \frac{17}{5}$$

Convert these mixed numbers into improper fractions

1).  $1\frac{3}{4}$   
7).  $3\frac{3}{4}$

2).  $2\frac{1}{3}$   
8).  $4\frac{2}{5}$

3).  $1\frac{4}{5}$   
9).  $2\frac{5}{8}$

4).  $3\frac{1}{2}$   
10).  $3\frac{2}{3}$

5).  $2\frac{2}{3}$   
11).  $1\frac{7}{10}$

6).  $1\frac{5}{6}$   
12).  $4\frac{3}{5}$