

Maths- Fractions

This lesson will be live on teams for
your class at;

9am-5L

10am-5H

11am-5M

Learning objective; To convert improper to mixed
number fractions.

Warm up-insert the correct numerator or denominator to make these fractions equivalent.

(a) $\frac{2}{3} = \frac{\quad}{6}$

(b) $\frac{1}{5} = \frac{\quad}{20}$

(c) $\frac{3}{4} = \frac{\quad}{12}$

(d) $\frac{5}{7} = \frac{10}{\quad}$

(e) $\frac{\quad}{5} = \frac{15}{25}$

(f) $\frac{4}{\quad} = \frac{12}{21}$

(g) $\frac{3}{10} = \frac{\quad}{50}$

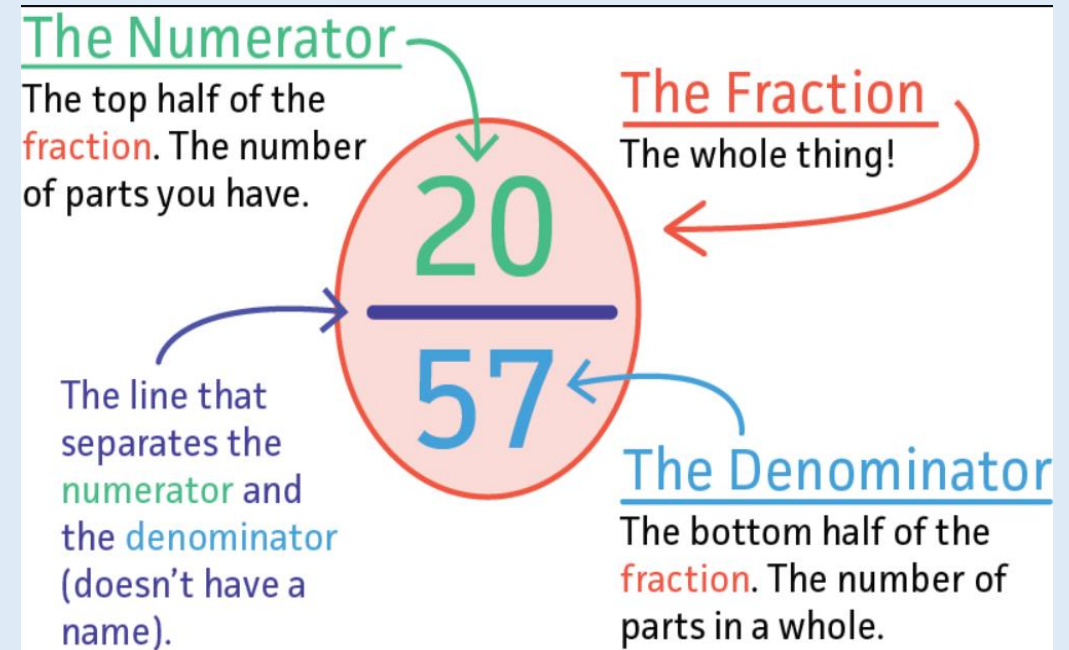
(h) $\frac{7}{8} = \frac{14}{\quad}$

What is a fraction?

A fraction is defined as;

- Part of a **whole**.
- A figure or set of items which has been partitioned **equally**.

They have **numerators** and **denominators** to determine how the whole of something (all of it) is being split equally and how much of it is being represented (coloured/added/used).



Converting from improper to mixed number

Just like converting from mixed number to improper fractions, we can follow a simple method to convert improper fractions into their mixed number equivalents.

1. Divide the **numerator** by the **denominator**.
2. Write down the **whole** number result.
3. Use the remainder as the new **numerator** over the original **denominator**.

Lets do some examples with Mr L

$$\frac{17}{5} = 3\frac{2}{5}$$

3 times & 2 left

goes into

(used 5 times table)

Improper fraction $\left\{ \begin{array}{l} 15 \text{ --- Numerator} \\ 7 \text{ --- Denominator} \end{array} \right.$

Step 1: Divide the numerator with the denominator

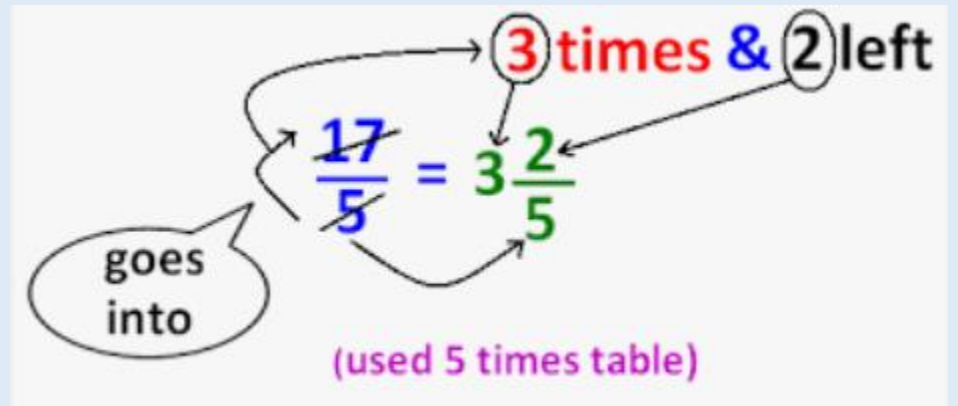
$$15 \div 7 = 2 \text{ R } 1$$

Step 2: Assemble the mixed fraction

$$\frac{15}{7} = 2\frac{1}{7}$$

Mixed number

Fluency



1) $\frac{5}{3} = 1 \frac{\quad}{3}$ 2) $\frac{7}{2} = 3 \frac{\quad}{2}$ 13) $\frac{13}{5} = 2 \frac{\quad}{5}$ 4) $\frac{8}{3} = 2 \frac{\quad}{3}$

5) $\frac{7}{4} =$ 6) $\frac{11}{5} =$ 7) $\frac{13}{3} =$ 8) $\frac{11}{2} =$

9) $\frac{16}{3} =$ 10) $\frac{14}{4} =$ 11) $\frac{19}{5} =$ 12) $\frac{17}{8} =$

Answers

$$1) \frac{5}{3} = 1 \frac{2}{3} \quad 2) \frac{7}{2} = 3 \frac{1}{2} \quad 3) \frac{13}{5} = 2 \frac{3}{5} \quad 4) \frac{8}{3} = 2 \frac{2}{3}$$

$$5) \frac{7}{4} = 1 \frac{3}{4} \quad 6) \frac{11}{5} = 2 \frac{1}{5} \quad 7) \frac{13}{3} = 4 \frac{1}{3} \quad 8) \frac{11}{2} = 5 \frac{1}{2}$$

$$9) \frac{16}{3} = 5 \frac{1}{3} \quad 10) \frac{14}{4} = 3 \frac{2}{4} \quad 11) \frac{19}{5} = 3 \frac{4}{5} \quad 12) \frac{17}{8} = 2 \frac{1}{8}$$

Additional Reasoning

Remind yourself about adding fractions with the same denominator.

Can you solve these fraction additions?

If the answer is an improper fraction, use today's method to also show it as a mixed number.

$$1) \frac{11}{3} + \frac{5}{3} = \frac{\quad}{3} \qquad 2) \frac{7}{5} + \frac{4}{5} = \frac{\quad}{5}$$

$$3) \frac{7}{6} + \frac{8}{6} = \frac{\quad}{6} \qquad 4) \frac{11}{10} + \frac{22}{10} = \frac{\quad}{10}$$

$$5) \frac{13}{5} + \frac{10}{5} = \frac{\quad}{5} \qquad 6) \frac{5}{4} + \frac{10}{4} = \frac{\quad}{4}$$

$$7) \frac{11}{7} + \frac{8}{7} = \qquad 8) \frac{11}{9} + \frac{15}{9} =$$

$$9) \frac{17}{10} + \frac{10}{10} = \qquad 10) \frac{17}{12} + \frac{25}{12} =$$

Answers

$$1) \frac{11}{3} + \frac{5}{3} = \frac{16}{3}$$

$$2) \frac{7}{5} + \frac{4}{5} = \frac{11}{5}$$

$$3) \frac{7}{6} + \frac{8}{6} = \frac{15}{6}$$

$$4) \frac{11}{10} + \frac{22}{10} = \frac{33}{10}$$

$$5) \frac{13}{5} + \frac{10}{5} = \frac{23}{5}$$

$$6) \frac{5}{4} + \frac{10}{4} = \frac{15}{4}$$

$$7) \frac{11}{7} + \frac{8}{7} = \frac{19}{7}$$

$$8) \frac{11}{9} + \frac{15}{9} = \frac{26}{9}$$

$$9) \frac{17}{10} + \frac{10}{10} = \frac{27}{10}$$

$$10) \frac{17}{12} + \frac{25}{12} = \frac{39}{12}$$

As a mixed number they are;

1) $5 \frac{1}{3}$

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

3) $2 \frac{3}{6}$

4) $3 \frac{3}{10}$

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

6) $3 \frac{3}{4}$

7) $2 \frac{5}{7}$

8) $2 \frac{8}{9}$

9) $2 \frac{7}{10}$

10) $3 \frac{3}{12}$

Plenary-complete the statements based on your knowledge of fractions.

- A fraction is.....
- A denominator is.....
- A numerator is.....
- A mixed number fraction is.....
- An improper fraction is