



Maths Fractions

Y4

Knowledge

- What is a fraction?
- Equivalent fractions
- Fractions greater than 1

Skills

- Count in fractions
- Add 2 or more fractions
- Subtract 2 fractions
- Subtract from whole amounts
- Calculate fractions of a quantity
- Problem solving – calculate quantities

Vocabulary

Numerator, denominator, unit fraction, non-unit, fraction, equivalent, halves, whole, add, subtract, convert, count up, count down

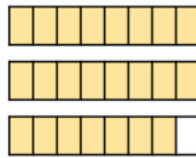
Inspirational Mathematician

Florence Nightingale (1820-1910)

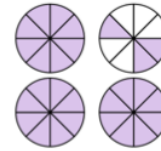
Nightingale's knowledge of maths became evident when she used her data to calculate the mortality rate in the hospital. These calculations showed that an improvement of the sanitary methods employed would result in a decrease in the number of deaths. By February 1855 the mortality rate had dropped from 60% to 2.2%.



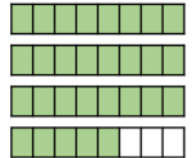
Fractions Greater than 1



$$2 \frac{7}{8}$$



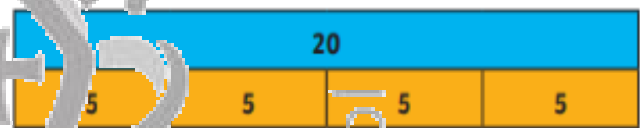
$$\frac{27}{8}$$



$$3 \frac{5}{8}$$

We can write fractions greater than one like the ones written above. We can have a numerator that is bigger than our denominator or we can have whole numbers and a fraction.

Fractions of Amounts



To find fractions of amounts, we divide by the denominator and multiply by the numerator.

E.g: $\frac{3}{4}$ of 20 = 15

$$20 \div 4 = 5 \quad 5 \times 3 = 15$$

Adding Two or More Fractions

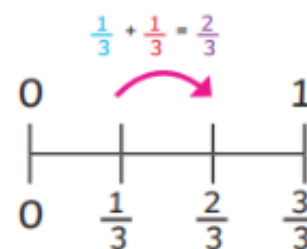
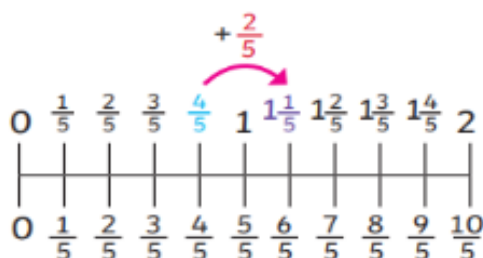
$$\frac{4}{5} + \frac{2}{5} = \frac{6}{5} \text{ or } 1\frac{1}{5}$$



$$\frac{2}{8} + \frac{4}{8} + \frac{1}{8} = \frac{7}{8}$$

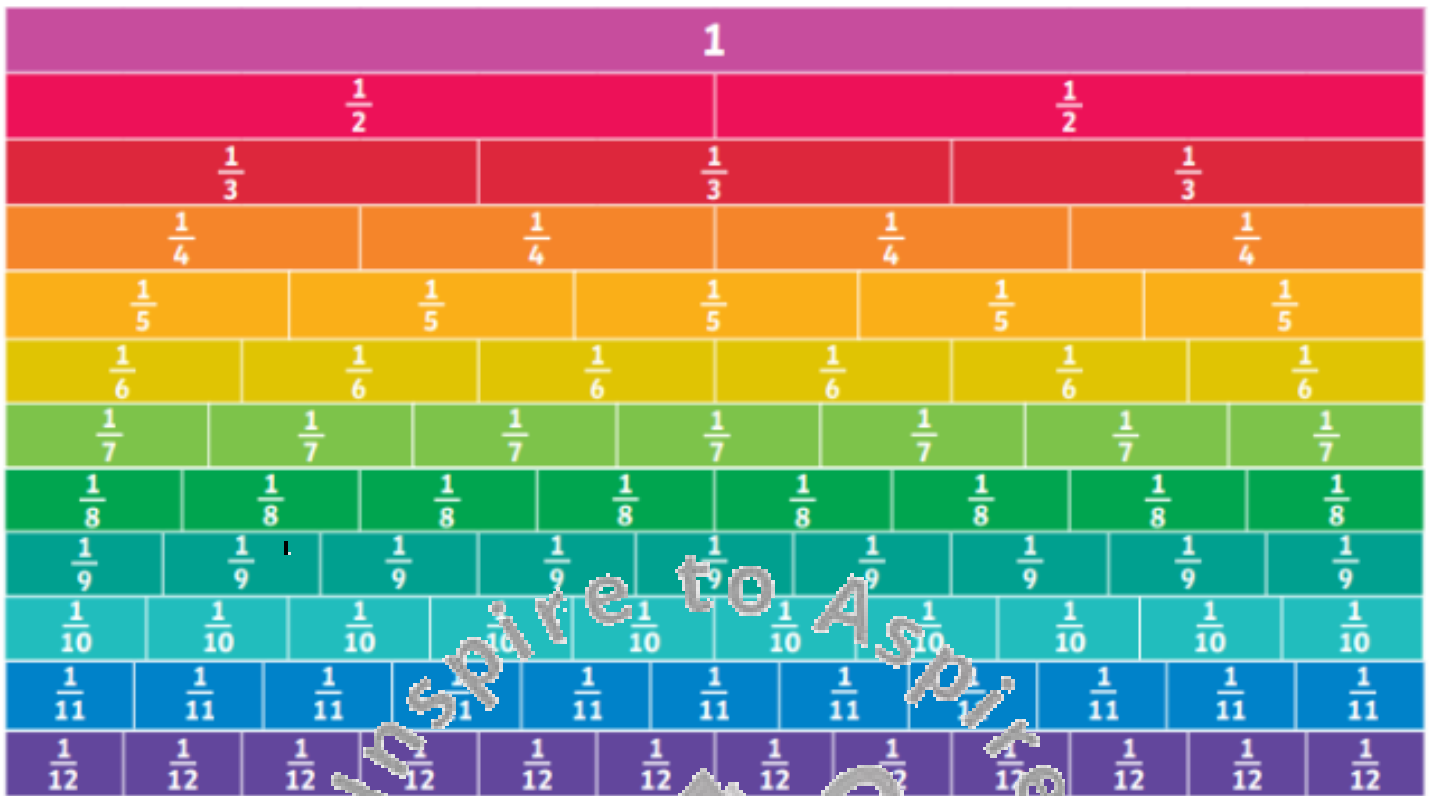


$$\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$$

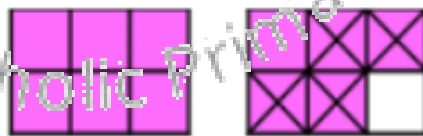
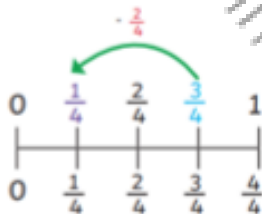
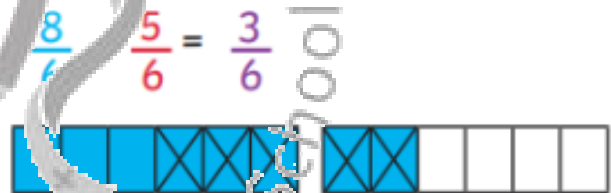
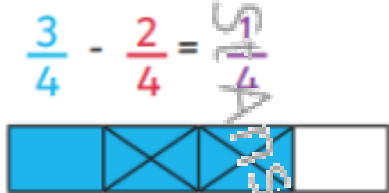


Fractions can be added together when they have the same denominators.

Fraction Wall (Equivalent Fractions)



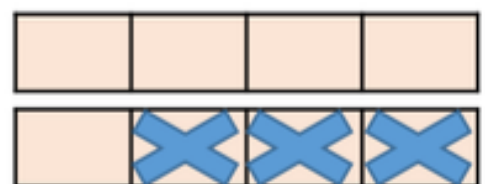
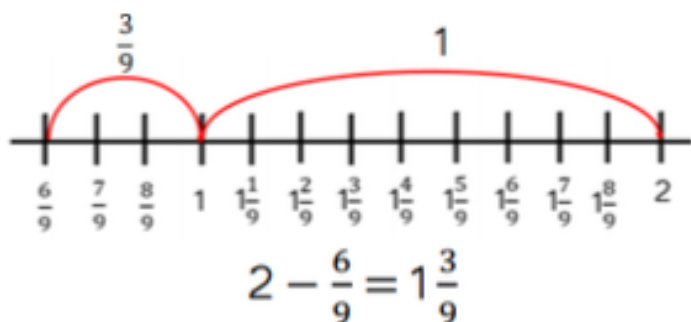
Subtracting Fractions



$$\frac{11}{6} - \frac{4}{6} = \frac{7}{6}$$

Fractions can be subtracted from each other when they have the same denominators.

Subtracting from the Whole



$$2 - \frac{3}{4} = \frac{8}{4} - \frac{3}{4} = \frac{5}{4} = 1\frac{1}{4}$$