



Year 4 – Maths – Fractions

Key vocabulary

numerator
denominator
unit fraction
non-unit fraction
equivalent
quantities
whole
halves
thirds
quarters
fifths
sixths
sevenths
eighths
ninths
tenths
elevenths
twelfths
quantities

Links to other learning

Year 3 – Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10; Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators; Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators; Recognise and show, using diagrams, equivalent fractions with small denominators; Add and subtract fractions with the same denominator within one whole; Compare and order unit fractions, and fractions with the same denominators.

Year 5 – Compare and order fractions whose denominators are all multiples of the same number; Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths; Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number; Add and subtract fractions with the same denominator and denominators that are multiples of the same number; Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams; Read and write decimal numbers as fractions; Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents; Round decimals with two decimal places to the nearest whole number and to one decimal place; Read, write, order and compare numbers with up to three decimal places; Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.

Key questions

Find an equivalent fraction for ____.
Explain how you know.

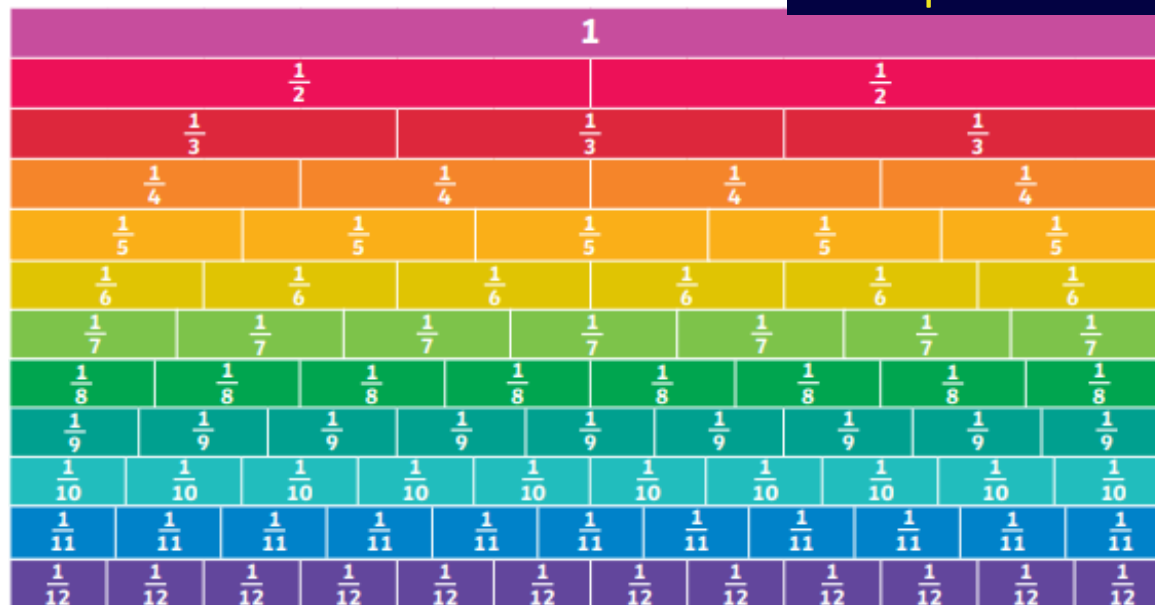
What is $9/11$ and $5/11$?

List 3 equivalent fractions for ____.

Count forwards in eighths,
starting at ____.

Compare the following fractions...

Equivalent fractions

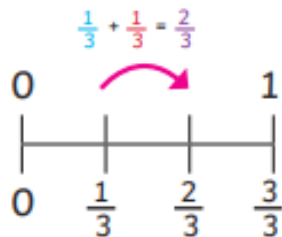


Adding fractions

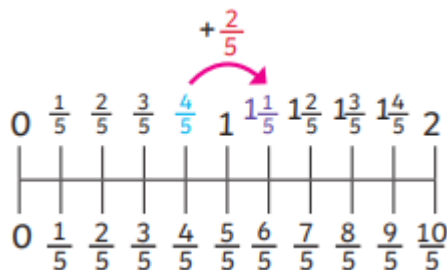


Fractions can be added when the denominators are the same.

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



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

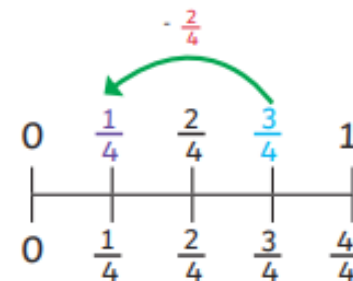


Subtracting fractions

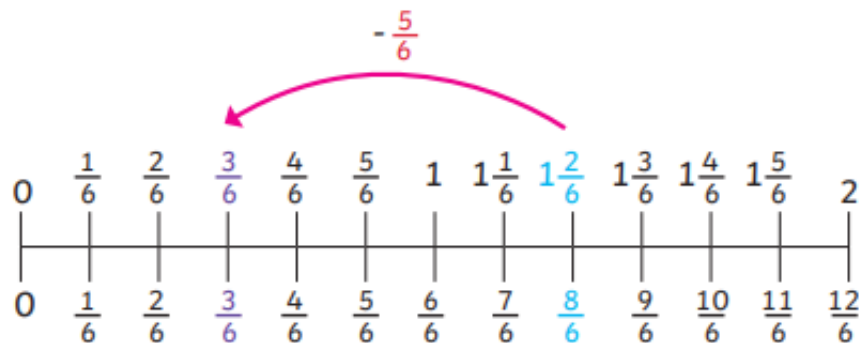


Fractions can be subtracted when the denominators are the same.

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



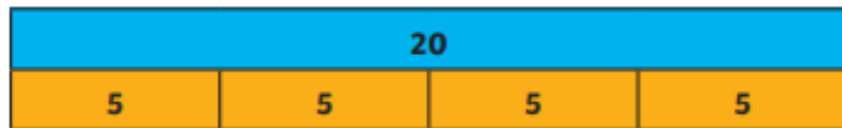
$$\frac{8}{6} - \frac{5}{6} = \frac{3}{6}$$



Fractions of quantities



To find quarters of 20:



$$\frac{1}{4} \text{ of } 20 = 5 \quad \frac{2}{4} \text{ of } 20 = 10 \quad \frac{3}{4} \text{ of } 20 = 15 \quad \frac{4}{4} \text{ of } 20 = 20$$