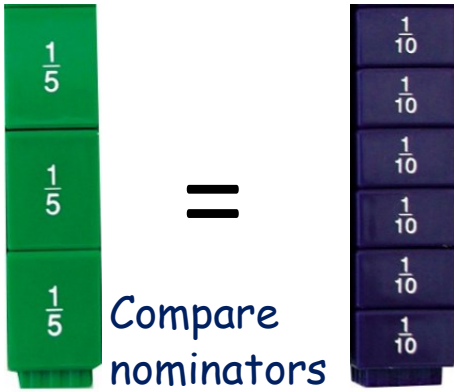
Year 5 Fractions

How can we progress with fractions?

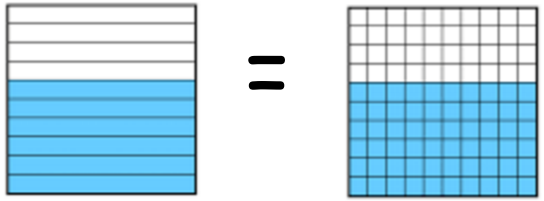
Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.

Concrete



Compare de-nominators and order fractions whose same number are all multi-ples of the

Pictorial



$$\frac{6}{10} = \frac{60}{100}$$

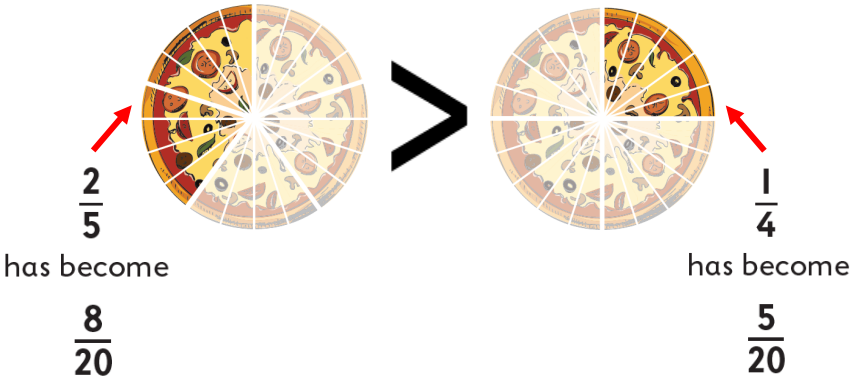
Abstract

$$\frac{3}{5} = \frac{6}{10} = \frac{60}{100}$$

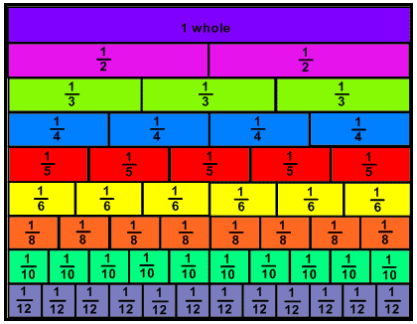
$$\frac{3}{4} = \frac{75}{100}$$

$$\frac{1}{5} = \frac{2}{10} = \frac{20}{100}$$

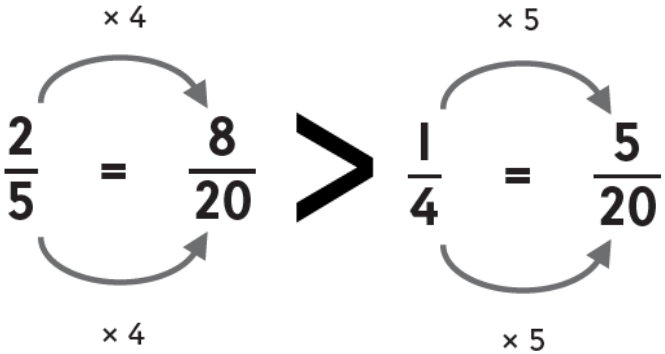
Concrete



Pictorial

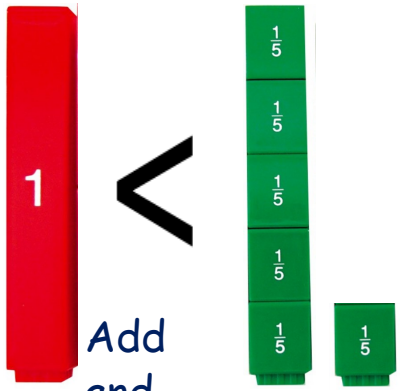


Abstract

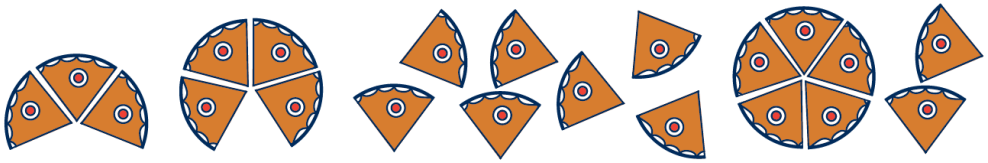


Recognise mixed numbers and improper fractions. Convert from one form to the other and write mathematical statements >1 as a mixed number.

Concrete



Pictorial



Abstract

$$\frac{7}{2} = 3\frac{1}{2}$$

because 7 ÷ 2 = 3 with 1 half left over

$$2\frac{1}{3} = \frac{7}{3}$$

because 2 x 3 = 6 with 1 third left to add

Add and subtract fractions with the same denominators and denominators that are multiples of the same numbers.

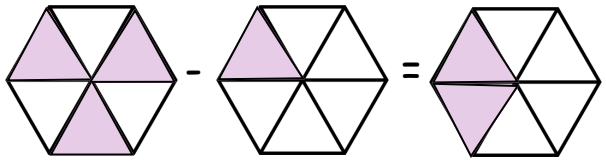
Concrete

So,

$\frac{8}{20} + \frac{5}{20} = \frac{13}{20}$

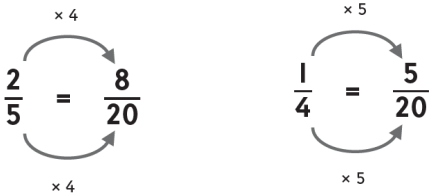
$\frac{2}{5} + \frac{1}{4} = \frac{13}{20}$

Pictorial



Abstract

$$\frac{2}{5} - \frac{1}{4}$$



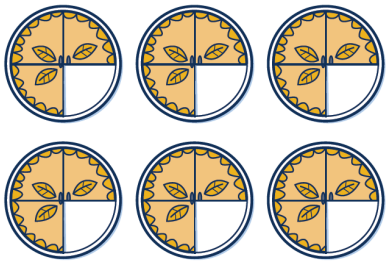
So,

$\frac{8}{20} - \frac{5}{20} = \frac{3}{20}$

$\frac{2}{5} - \frac{1}{4} = \frac{3}{20}$

Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

Concrete



6 lots of $\frac{3}{4}$

Pictorial

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

Abstract

Multiply a proper fraction by a whole number:

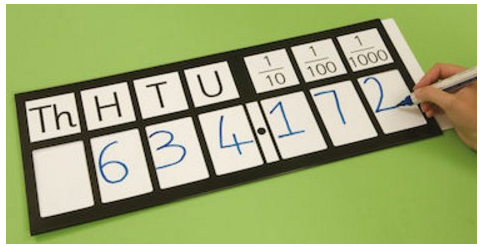
$$\frac{3}{4} \times 6 = \frac{18}{4}$$

Change to a mixed number:

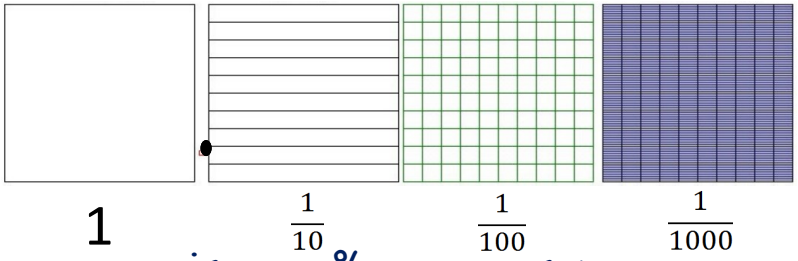
$$\frac{18}{4} = 4\frac{2}{4}$$

Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.

Concrete



Pictorial



Abstract

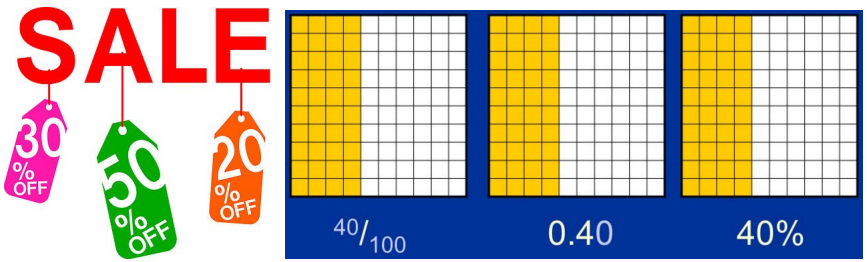
67.153

How many thousandths does this number have? How many more thousandths do you need to add to make 67.16?

Recog- nise % sym- bol and understand the meaning: write % as a fraction, decimal and percentage.

Concrete

Pictorial



Abstract

$\frac{4}{10} = 40\% = 0.4$

$\frac{32}{100} = 32\% = 0.32$

$\frac{75}{100} = 75\% = 0.75$

$\frac{2}{25} = \frac{8}{100} = 8\% = 0.08$