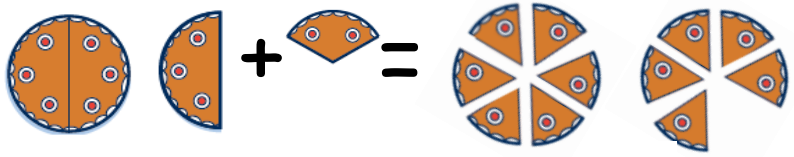
Year 6 Fractions

How can we progress with fractions?

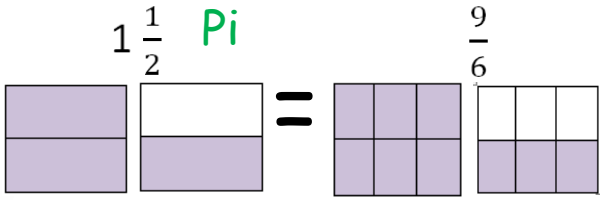
Add and subtract fractions with different denominators and mixed numbers using the concept of equivalent fractions.

Concrete

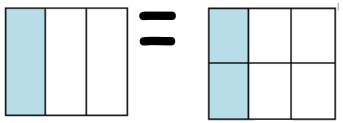


$1\frac{1}{2}$ $\frac{1}{3}$ $1\frac{5}{6}$

Pi



$1\frac{1}{2}$ $\frac{9}{6}$



$\frac{1}{3}$ $\frac{2}{6}$

Com-pare fractions including fractions >1. and order frac-tions

Abstract

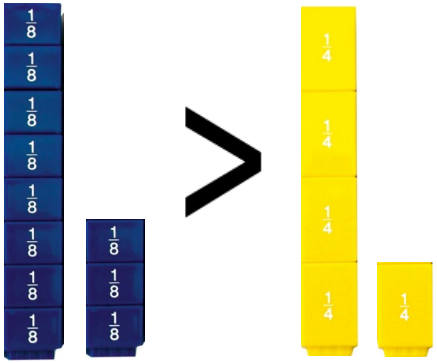
$$1\frac{1}{2} + \frac{1}{3} = 1\frac{5}{6}$$

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

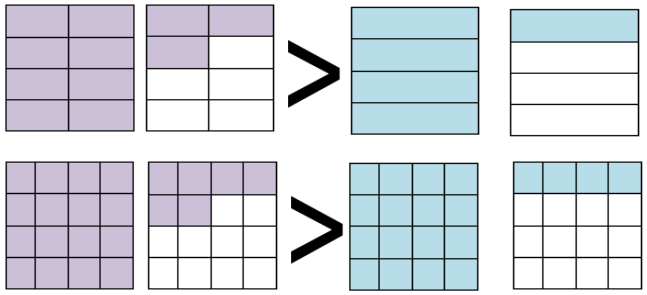
$\frac{3}{2} = \frac{9}{6}$ and $\frac{1}{3} = \frac{2}{6}$

so $\frac{9}{6} + \frac{2}{6} = \frac{11}{6} = 1\frac{5}{6}$

Concrete



Pictorial



Abstract

Which is greater?

$\frac{2}{8} < \frac{6}{16}$

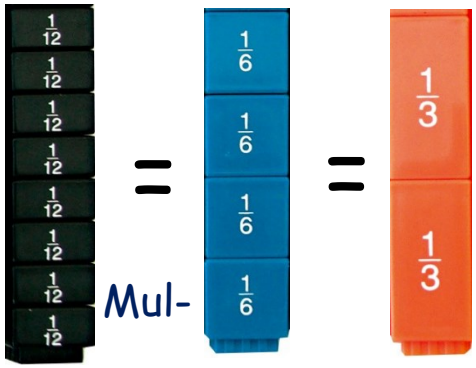
Ordering from smallest to largest by using equivalent fractions:

$\frac{5}{12}, \frac{2}{3}, \frac{5}{6}$

$\frac{5}{12}, \frac{8}{12}, \frac{10}{12}$

Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.

Concrete

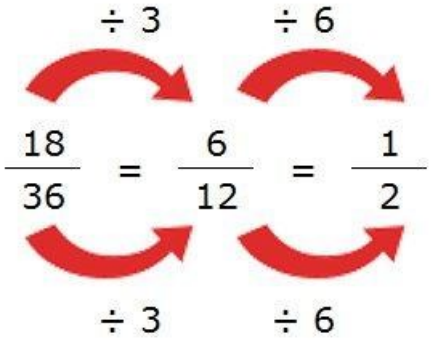


Mul-tiply simple proper fracing the answer in its simplest form.

Pictorial

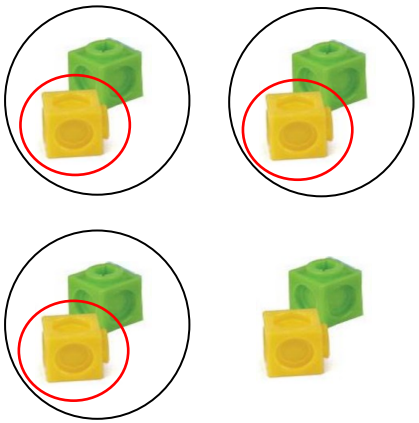
pairs of tions, writ-

Abstract



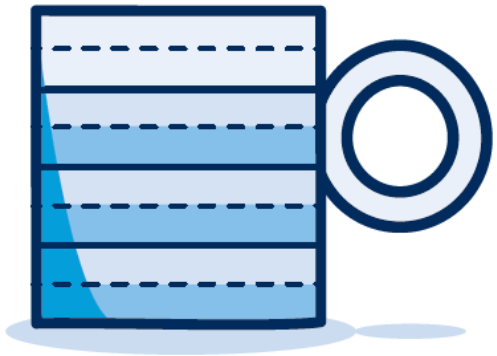
Concrete

$\frac{1}{2}$ of $\frac{3}{4}$



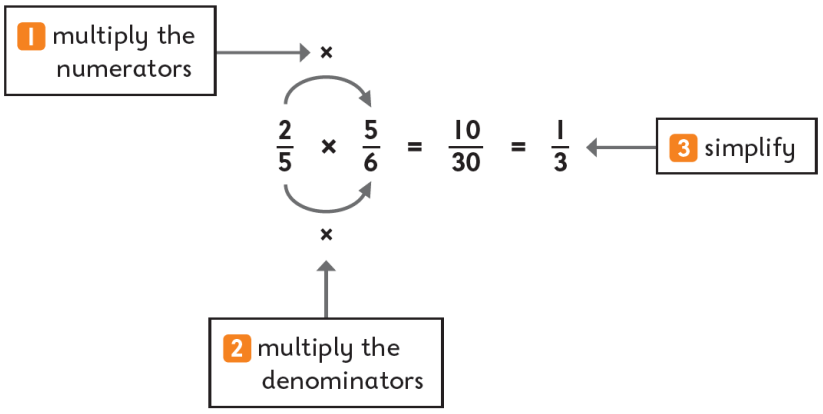
Pictorial

$\frac{1}{2}$ of $\frac{3}{4}$



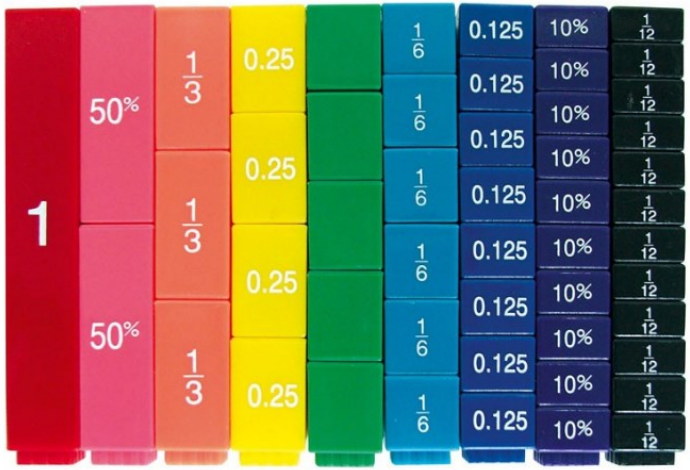
Abstract

$\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$



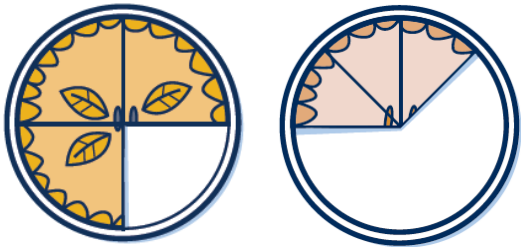
Recall and use equivalences between simple fractions, decimals and percentages including in different contexts.

Concrete



Pictorial

Which would you prefer 75% or $\frac{3}{8}$ of a pie?



75% $\frac{3}{8}$

Divide proper fractions by whole numbers.

Abstract

John scored $\frac{40}{80}$ in his spelling test and Hannah scored 40%. Who scored more?

John = $\frac{40}{80}$ = 50%

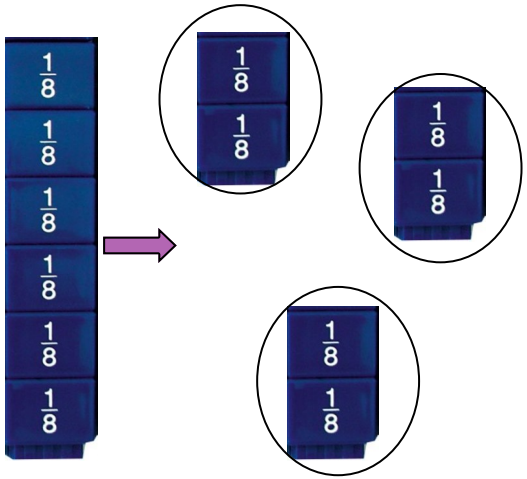
Hannah = 40%

One paving slab is 0.3m long and another is $\frac{1}{4}$ of a metre. Which is longer?

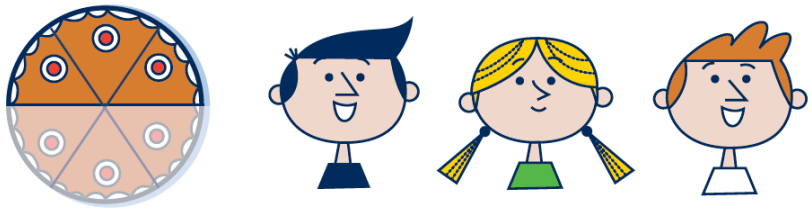
$\frac{1}{4}$ = 0.25m

0.3m is larger than 0.25m

Concrete



Pictorial



$\frac{1}{2} \div 3 = \frac{1}{6}$

Abstract

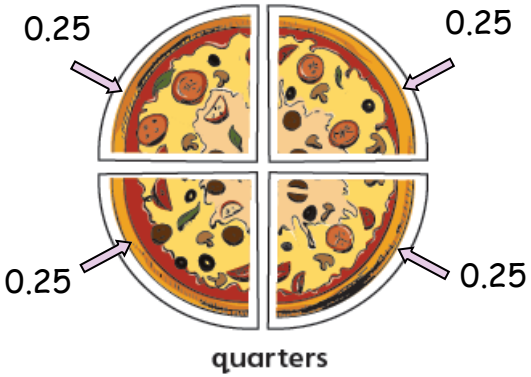
$\frac{1}{2} \div 3 = \frac{1}{6}$

Keep it, change it, flip it!

$\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$

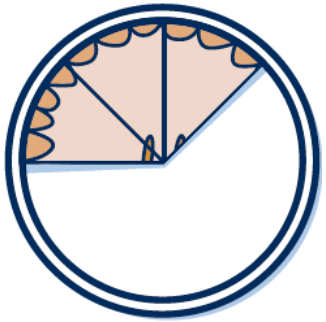
Associate fractions with division and calculate decimal fraction equivalents.

Concrete



Pictorial

3 slices of pie 'out of' 8



$\frac{3}{8}$

Abstract

$\frac{3}{8}$

3 'out of' 8 is the same as 3 'divided by' 8

$3 \div 8 = 0{\cdot}375$

So $\frac{3}{8} = 0{\cdot}375$