Add fractions

1 Complete the additions.

Use the bar models to help you.

a) $\frac{1}{3} + \frac{1}{3} = \boxed{}$

b) $\frac{1}{5} + \frac{1}{5} = \boxed{}$

c) $\frac{1}{5} + \frac{2}{5} = \boxed{}$

d) $\frac{1}{5} + \frac{3}{5} = \boxed{}$

2 Shade the circles and complete the additions.

a) $\frac{1}{8} + \frac{3}{8} = \boxed{}$

b) $\frac{5}{8} + \frac{1}{8} = \boxed{}$

c) $\frac{3}{8} + \frac{3}{8} = \boxed{}$

d) $\frac{5}{8} + \frac{3}{8} = \boxed{}$

3 Complete the part-whole models.

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

c) $\frac{1}{6}$ $\frac{5}{6}$

b) $\frac{1}{6}$ $\frac{3}{6}$

Which part-whole model is the odd one out? _____

Talk about your choice with a partner. Did they choose the same odd one out?

4 Alex and Huan are eating a cake.

Alex eats $\frac{4}{7}$ of the cake.

Huan eats $\frac{2}{7}$ of the cake.

What fraction of the cake have they eaten altogether?

They have eaten $\boxed{}$ of the cake altogether.

5 Teddy is adding fractions.

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

a) Draw a bar model to show that Teddy is wrong.

b) Complete the addition $\frac{1}{4} + \frac{2}{4} = \boxed{}$

6 Annie has baked 12 muffins.

She puts them into 2 boxes.

What fraction of the muffins could she put in each box?

Complete the table to show different possibilities.

One has been done for you.

Box 1	Box 2
$\frac{1}{12}$	$\frac{11}{12}$

Are there any other possibilities? Talk about it with a partner.

7 Complete the additions.

a) $\frac{3}{8} + \frac{4}{8} = \boxed{}$

d) $\frac{3}{103} + \frac{4}{103} = \boxed{}$

b) $\frac{3}{9} + \frac{4}{9} = \boxed{}$

e) $\frac{5}{31} + \frac{9}{31} = \boxed{}$

c) $\frac{3}{29} + \frac{4}{29} = \boxed{}$

f) $\frac{17}{111} + \frac{33}{111} = \boxed{}$

Please watch the video first https://vimeo.com/405758809
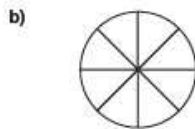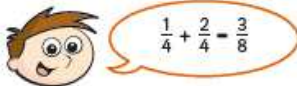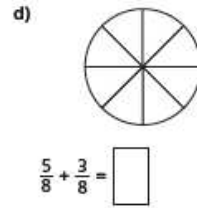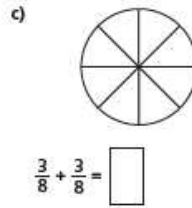
Subtract fractions

1 Complete the subtractions.

Use the bar models to help you.

a) $\frac{2}{3} - \frac{1}{3} = \square$

b) $\frac{2}{5} - \frac{1}{5} = \square$
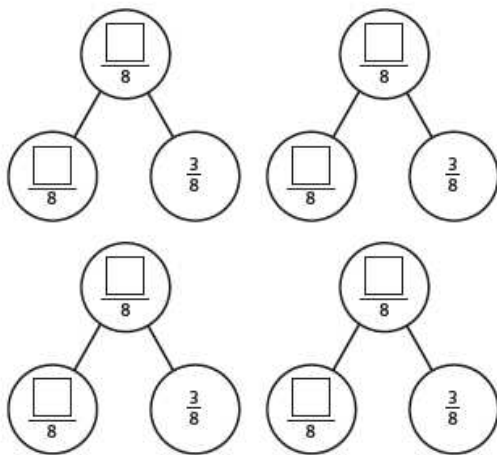
c) $\frac{3}{5} - \frac{1}{5} = \square$

d) $\frac{4}{5} - \frac{1}{5} = \square$

2 Jack has $\frac{7}{8}$ of a chocolate bar.

He eats $\frac{4}{8}$ of the chocolate bar.
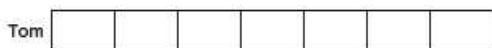
What fraction of the chocolate bar does he have left?

$\square$

3 Complete the subtractions.

Simplify your answers where possible.

a) $\frac{7}{10} - \frac{1}{10} = \square = \square$

b) $\frac{7}{10} - \frac{2}{10} = \square = \square$

c) $\frac{7}{10} - \frac{3}{10} = \square = \square$

d) $\frac{7}{12} - \frac{3}{12} = \square = \square$

e) $\frac{8}{12} - \frac{4}{12} = \square = \square$

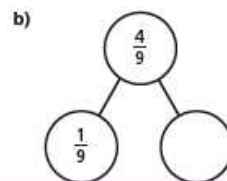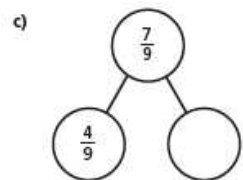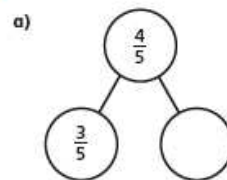f) $\frac{9}{12} - \frac{5}{12} = \square = \square$

g) $\frac{9}{59} - \frac{5}{59} = \square$

h) $\frac{13}{127} - \frac{9}{127} = \square$

4 Complete the part-whole models.

a) $\frac{4}{5}$ / $\frac{3}{5}$ / ◯

c) $\frac{7}{9}$ / $\frac{4}{9}$ / ◯

b) $\frac{4}{9}$ / $\frac{1}{9}$ / ◯

5 Complete the part-whole model in four different ways.

$\frac{\square}{8}$ / $\frac{\square}{8}$ / $\frac{3}{8}$

$\frac{\square}{8}$ / $\frac{\square}{8}$ / $\frac{3}{8}$

$\frac{\square}{8}$ / $\frac{\square}{8}$ / $\frac{3}{8}$

$\frac{\square}{8}$ / $\frac{\square}{8}$ / $\frac{3}{8}$

6 Kim has read $\frac{6}{7}$ of her book.

Tom has read $\frac{2}{7}$ of his book.

a) Shade the bar models to represent this information.

Kim

Tom

b) How much more has Kim read than Tom?

Kim has read $\square$ more of her book than Tom.

7 Write the missing numerators.

a) $\frac{8}{9} - \frac{\square}{9} = \frac{7}{9}$

b) $\frac{5}{11} - \frac{\square}{11} = \frac{4}{11}$

c) $\frac{8}{9} - \frac{\square}{9} = \frac{3}{9} + \frac{4}{9}$

d) $\frac{7}{9} - \frac{5}{9} = \frac{\square}{9} - \frac{4}{9}$

e) $\frac{7}{10} - \frac{5}{10} = \frac{1}{10} + \frac{\square}{10}$

f) $\frac{\square}{4} - \frac{1}{4} = \frac{1}{4} + \frac{1}{4}$

g) $\frac{\square}{5} - \frac{2}{5} = \frac{1}{5} + \frac{2}{5}$

h) $\frac{4}{5} + \frac{1}{5} = \frac{3}{7} - \frac{2}{7} + \frac{\square}{7}$

8 Complete the table to show three possible values of the square and triangle.

$\frac{\triangle}{92} - \frac{\blacksquare}{92} = \frac{13}{92}$

▲	■

How many other answers can you find?

1 The jug is $\frac{4}{7}$ full.

It needs 72 ml more to be full.
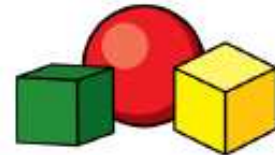
How much water can the jug hold in total?

2 A box is full of spheres and cubes.

$\frac{5}{6}$ of the shapes are cubes.

$\frac{3}{4}$ of the cubes are yellow.

There are 60 yellow cubes in the box.

How many shapes are there in total?

3 Complete the calculations.

$\bigcirc - \triangle = 11$

$\bigcirc + \bigcirc + \bigcirc + \bigcirc = 96$

$\square + \bigcirc + \triangle =$

$\triangle + \square = 16$

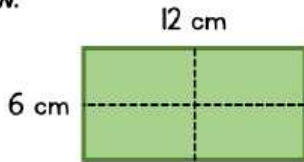**4** An apple and banana cost the same as two pears.

Three pears cost £1.20

A pear costs 12p more than an apple.

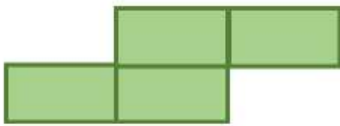What is the cost of a banana?

1 A rectangle has a length of 12 cm and a width of 6 cm.

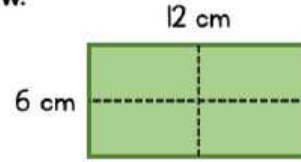It is cut in quarters like shown below.

12 cm

6 cm

The four parts are put together to make the following shape.

What is the perimeter of the new shape?

2 A rectangle has a length of 12 cm and a width of 6 cm.

It is cut in quarters like shown below.

12 cm

6 cm

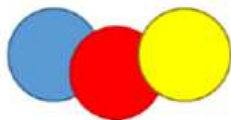The four parts are put together to make the following shape.

What other perimeters could be made?

3 There are 81 red, blue and yellow counters in total.

There are 9 more red counters than yellow ones.

There are the same amount of yellow and blue counters.

How many of each colour are there?

4 There are 81 red, blue and yellow counters in total.

There are 9 more red counters than yellow ones.

There are the same amount of red and blue counters.

How many of each colour are there?

Friday 15th May 2020   Consolidation day!

TTRS- complete minimum of 5 games. Where will you end up on the leaderboard this week?
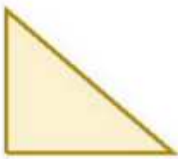
These are activities to keep our maths learning 'sticky'. Select at least 2 of the activities below to complete your maths lesson today.

- Numbots
- BBC Bitesize game- [Guardians Defenders of Mathematica](#)
- Challenge 1:

This is half of Lee's strawberries.
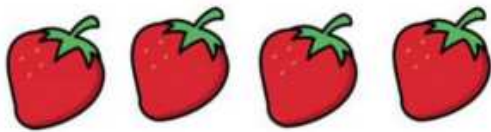
How many strawberries does Lee have?

This is half of Lee's shape.

What could the whole shape look like?

- Challenge 2:

Tim buys a lolly and a chew.
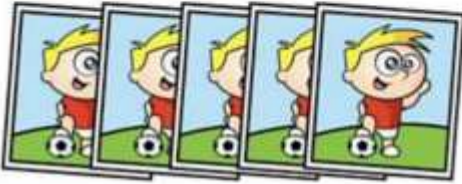
The lolly costs 12p more than the chew.

The total cost of the two items is 82p.

How much does the lolly cost?

Stickers come in packs of 5.

Max buys 12 packs.

He gave his three friends some stickers.

They each receive the same number.

He has 27 stickers left.

How many stickers did Max give each of his friends?

• Challenge 4

Here are 3 containers.

- The jug can hold **1500 ml**.
- The bucket can hold **2 litres**.
- The barrel can hold **15 litres**.

Anisa wants to fill the barrel with water.

Find 2 ways that Anisa can fill the barrel using the jug and bucket.