Add 2 or more fractions

1 Complete the additions.
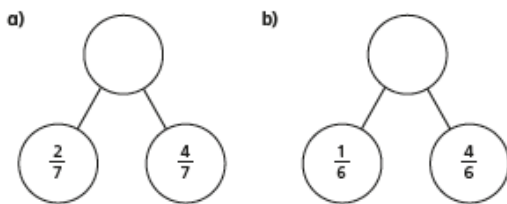
a) $\frac{1}{5} + \frac{2}{5} = \boxed{}$

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

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

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

2 Complete the part-whole models.

a) $\frac{2}{7}$ $\frac{4}{7}$

b) $\frac{1}{6}$ $\frac{4}{6}$

4 $\frac{\boxed{}}{4} + \frac{\boxed{}}{4} = \frac{9}{4}$

What could the missing numerators be?

Give four different possibilities.

$\frac{\boxed{}}{4} + \frac{\boxed{}}{4} = \frac{9}{4}$ $\frac{\boxed{}}{4} + \frac{\boxed{}}{4} = \frac{9}{4}$

$\frac{\boxed{}}{4} + \frac{\boxed{}}{4} = \frac{9}{4}$ $\frac{\boxed{}}{4} + \frac{\boxed{}}{4} = \frac{9}{4}$

5 Tommy is adding fractions.

$\frac{3}{4} + \frac{3}{4} = \frac{6}{8}$
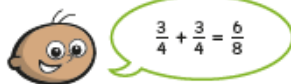
Explain why Tommy is incorrect.

_____

_____

_____

c) $\frac{4}{7}$ $\frac{4}{7}$
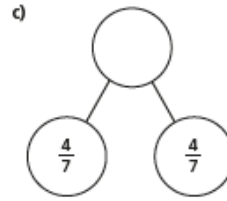
d) Which part-whole model is the odd one out?

Explain your choice to a partner.

Did you both have the same answer?

3 Complete the additions.

a) $\frac{3}{7} + \frac{3}{7} = \boxed{}$

e) $\frac{8}{11} + \frac{6}{11} = \boxed{} = \boxed{}$

b) $\frac{3}{7} + \frac{4}{7} = \boxed{} = \boxed{}$

f) $\frac{4}{11} + \frac{4}{11} + \frac{6}{11} = \boxed{} = \boxed{}$

c) $\frac{4}{5} + \frac{3}{5} = \boxed{} = \boxed{}$

g) $\frac{3}{11} + \frac{3}{11} + \frac{8}{11} = \boxed{} = \boxed{}$

d) $\frac{8}{5} + \frac{6}{5} = \boxed{} = \boxed{}$

h) $\frac{3}{7} + \frac{3}{7} + \frac{8}{7} = \boxed{} = \boxed{}$

6 Complete the number sentences.

a) $\frac{3}{8} + \frac{\boxed{}}{8} = \frac{7}{8}$

e) $\frac{4}{9} + \frac{\boxed{}}{9} = \frac{13}{9} = 1\frac{\boxed{}}{9}$

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

f) $\frac{4}{9} + \frac{\boxed{}}{9} = \frac{\boxed{}}{9} = 1\frac{7}{9}$

c) $\frac{3}{16} + \frac{\boxed{}}{\boxed{}} = 1$

g) $\frac{5}{7} + \frac{\boxed{}}{7} + \frac{5}{7} = 2$

d) $\frac{4}{9} + \frac{\boxed{}}{9} = \frac{11}{9} = 1\frac{\boxed{}}{9}$

h) $\frac{5}{7} + \frac{\boxed{}}{7} + \frac{5}{7} = 3$

7 Rosie, Whitney and Teddy have each been for a walk.

Rosie walked $\frac{5}{8}$ km.

Whitney walked $\frac{7}{8}$ km.

Teddy walked $\frac{3}{8}$ km.

a) How far did they walk altogether? $\boxed{}$ km

b) Jack also went for a walk.

Altogether the four children walked 3 km.

How far did Jack walk? $\boxed{}$ km

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Subtract 2 fractions

1 Complete the subtractions.

a)
$$\frac{4}{5}-\frac{1}{5}=\boxed{}$$

b)
$$\frac{4}{5}-\frac{2}{5}=\boxed{}$$

c)
$$\frac{5}{7}-\frac{3}{7}=\boxed{}$$
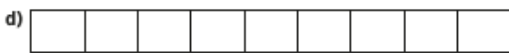
d)
$$\frac{7}{9}-\frac{4}{9}=\boxed{}$$
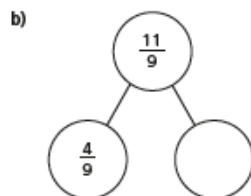
4 Jack has $2\frac{1}{4}$ kg of potatoes.

He uses $\frac{5}{4}$ kg of potatoes.
How many kilograms does he have left?

$2\frac{1}{4}$ kg

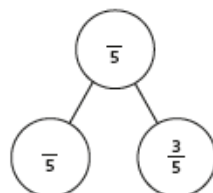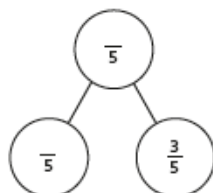Jack has $\boxed{}$ kg left.

5 Complete the part-whole models.

a) $\frac{5}{9}$, $\frac{1}{9}$

b) $\frac{11}{9}$, $\frac{4}{9}$
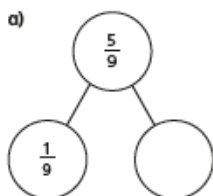
6 Complete the part-whole model in two different ways.

$\frac{}{5}$, $\frac{}{5}$, $\frac{3}{5}$

$\frac{}{5}$, $\frac{}{5}$, $\frac{3}{5}$

2 Complete the calculations.

a) $\frac{7}{10}-\frac{3}{10}=\boxed{}$ e) $\frac{9}{11}-\frac{3}{11}=\boxed{}$

b) $\frac{2}{3}-\frac{1}{3}=\boxed{}$ f) $\frac{6}{7}-\frac{4}{7}=\boxed{}$

c) $\frac{6}{6}-\frac{6}{6}=\boxed{}$ g) $\frac{8}{93}-\frac{2}{93}=\boxed{}$

d) $\frac{3}{4}-\frac{1}{4}=\boxed{}$ h) $\frac{10}{991}-\frac{3}{991}=\boxed{}$

3 Complete the subtractions

a) $\frac{9}{5}-\frac{6}{5}=\boxed{}$ e) $\frac{8}{3}-\frac{4}{3}=\boxed{}=\boxed{}$

b) $\frac{9}{5}-\frac{5}{5}=\boxed{}$ f) $\frac{11}{3}-\frac{4}{3}=\boxed{}=\boxed{}$

c) $\frac{9}{5}-\frac{4}{5}=\boxed{}=\boxed{}$ g) $\frac{14}{3}-\frac{4}{3}=\boxed{}=\boxed{}$

d) $\frac{9}{2}-\frac{4}{2}=\boxed{}=\boxed{}$ h) $\frac{15}{3}-\frac{5}{3}=\boxed{}=\boxed{}$

7 Fill in the missing numerators.

a) $\frac{10}{11}-\frac{\boxed{}}{11}=\frac{7}{11}$ d) $\frac{15}{4}-\frac{\boxed{}}{4}=2$

b) $\frac{10}{11}-\frac{\boxed{}}{11}=\frac{7}{11}-\frac{4}{11}$ e) $\frac{9}{4}-\frac{1}{4}=\frac{\boxed{}}{4}+1$

c) $\frac{10}{11}-\frac{4}{11}=\frac{\boxed{}}{11}-\frac{7}{11}$ f) $\frac{11}{4}-\frac{3}{4}=\frac{11}{3}-\frac{\boxed{}}{3}$

8 Alex and Annie are taking turns playing a computer game.
Annie plays for a total of $2\frac{1}{4}$ hours.
Annie plays for $\frac{3}{4}$ of an hour more than Alex.
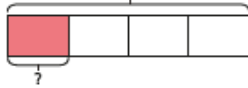How much time do they spend in total playing on the game?

$\boxed{}$ hours

Fractions of a quantity

1 Complete the number sentences.

a) $\frac{1}{4}$ of 20 = ☐

20

?

b) $\frac{1}{5}$ of 20 = ☐

20

?

c) $\frac{1}{10}$ of 20 = ☐

20

?

d) $\frac{1}{4}$ of 40 = ☐

40

?

e) $\frac{1}{8}$ of 40 = ☐

40

?
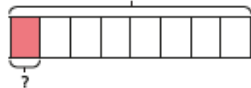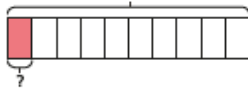
f) $\frac{1}{8}$ of 80 = ☐

80

?

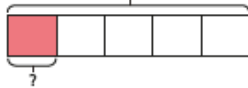**3** Complete the number sentences.

a) $\frac{1}{4}$ of 24 = ☐

$\frac{3}{4}$ of 24 = ☐
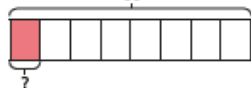
c) $\frac{1}{8}$ of 32 = ☐

$\frac{5}{8}$ of 32 = ☐

b) $\frac{1}{7}$ of 35 = ☐

$\frac{3}{7}$ of 35 = ☐

$\frac{5}{7}$ of 35 = ☐

d) $\frac{5}{8}$ of 64 = ☐

$\frac{7}{8}$ of 64 = ☐

$\frac{10}{8}$ of 64 = ☐

4 Match the calculations to the answers.

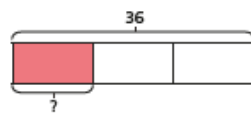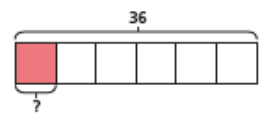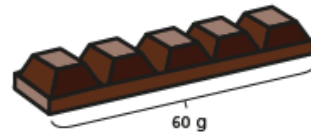| $\frac{2}{3}$ of 18 | | 18 |
$\frac{5}{6}$ of 18		15
$\frac{9}{10}$ of 20		16
$\frac{4}{5}$ of 20		12

g) $\frac{1}{3}$ of 36 = ☐

36

?

h) $\frac{1}{6}$ of 36 = ☐

36

?

2 Filip has a chocolate bar with 5 equal pieces.
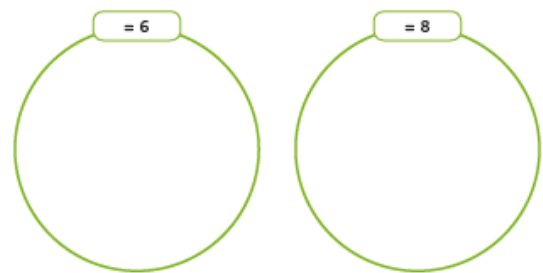The chocolate bar weighs 60 g.

60 g

a) What is the mass of one piece?

The mass of one piece is ☐ g.

b) Filip eats $\frac{3}{5}$ of the bar of chocolate.
How many grams does Filip eat?

Filip eats ☐ g of chocolate.

5 a) Write each calculation in the correct circle.

$\frac{1}{2}$ of 16 $\frac{1}{4}$ of 24 $\frac{2}{3}$ of 9 $\frac{3}{2}$ of 4 $\frac{1}{6}$ of 48

= 6

= 8

b) Write one more calculation in each circle.

6 Write <, > or = to compare the calculations.

a) $\frac{2}{7}$ of 21 ◯ $\frac{2}{3}$ of 21

b) $\frac{3}{5}$ of 40 ◯ $\frac{2}{3}$ of 36

c) $\frac{6}{8}$ of 40 ◯ $\frac{3}{4}$ of 40
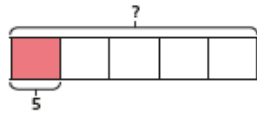
d) $\frac{6}{10}$ of 50 ◯ $\frac{3}{10}$ of 100

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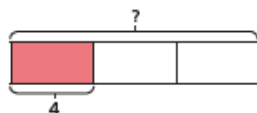## Calculate quantities

White Rose Maths

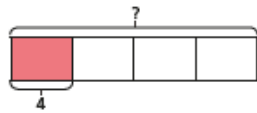**1** Match the calculations to the bar models.

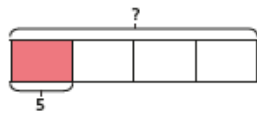Work out the missing quantities.

$\frac{1}{4}$ of ☐ = 5

$\frac{1}{4}$ of ☐ = 4

$\frac{1}{5}$ of ☐ = 5

$\frac{1}{3}$ of ☐ = 4

c)

12

d)

12
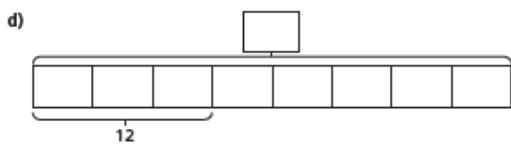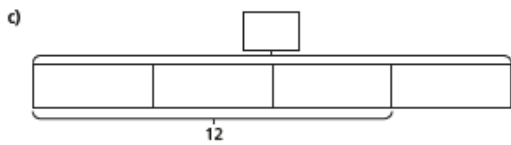
4 Complete the calculations.

a) $\frac{1}{2}$ of ☐ = 30

b) $\frac{1}{2}$ of ☐ = 15

c) $\frac{1}{4}$ of ☐ = 15

d) $\frac{3}{4}$ of ☐ = 15

e) $\frac{3}{7}$ of ☐ = 15

f) $\frac{5}{7}$ of ☐ = 15

g) $\frac{5}{7}$ of ☐ = 35

h) $\frac{7}{5}$ of ☐ = 35

2 Complete the sentences.

a) When one fifth is 1, the whole is ☐
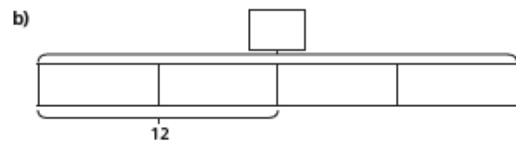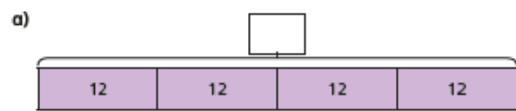
When one fifth is 10, the whole is ☐

When one fifth is 20, the whole is ☐

b) When $\frac{1}{7}$ is 2, the whole is ☐

When $\frac{1}{7}$ is 4, the whole is ☐

When $\frac{1}{7}$ is 8, the whole is ☐

3 Complete the bar models and fill in the whole.

a)

| 12 | 12 | 12 | 12 |

b)

12

5 Dora and Mo have a full bottle of juice.

Dora drinks $\frac{2}{5}$ of the juice.

Mo drinks $\frac{1}{5}$ of the juice.

There is 150 ml of juice left in the bottle.

How much juice was in the full bottle?

☐ ml

6 Rosie and Ron are collecting red and blue counters.

They have the same number of blue counters.

They have a different number of red counters.

Rosie: I have 18 counters altogether. $\frac{2}{3}$ are blue.

Ron: $\frac{3}{4}$ of my counters are blue.

a) How many counters does Ron have altogether?

☐

b) How many red counters do they each have?

Rosie has ☐ red counters.

Ron has ☐ red counters.

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](#)
- Maths 2Dos on Purple Mash

Challenge 1

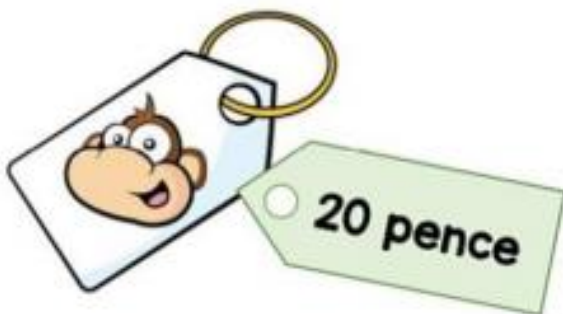Eric bakes these two trays of muffins.
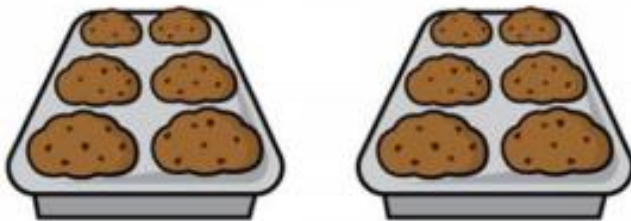
He eats 2 muffins.

His dad eats 3 muffins.

His sister eats 4 muffins.

How many muffins does he have left?

Challenge 2

Lola buys this key ring.

20 pence

Her mum givers a quarter of the money.

She pays for the rest herself.

How much does she pay herself?

Challenge 3

This year my age is a multiple of 4

Next year my age will be a multiple of 5

I'm older than 18, but younger than 42

How old is the teacher?