

Maths answers

Monday

1 Complete the additions.

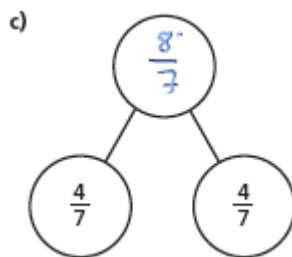
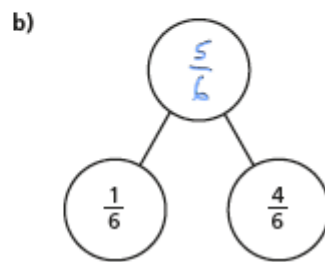
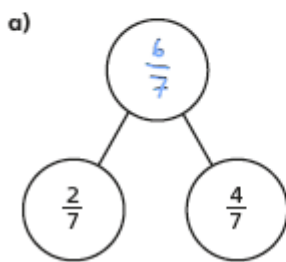
a)   $\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$

b)   $\frac{1}{5} + \frac{3}{5} = \frac{4}{5}$

c)   $\frac{3}{8} + \frac{3}{8} = \frac{6}{8}$

d)   $\frac{3}{8} + \frac{1}{8} = \frac{4}{8}$

2 Complete the part-whole models.



d) Which part-whole model is the odd one out?

C is the odd one out. When you add the 2 fractions together, the answer is more than a whole (an improper fraction – the numerator is larger than the denominator).

3 Complete the additions.

$$\text{a) } \frac{3}{7} + \frac{3}{7} = \frac{6}{7}$$

$$\text{e) } \frac{8}{11} + \frac{6}{11} = \frac{14}{11} = 1\frac{3}{11}$$

$$\text{b) } \frac{3}{7} + \frac{4}{7} = \frac{7}{7} = 1$$

$$\text{f) } \frac{4}{11} + \frac{4}{11} + \frac{6}{11} = \frac{14}{11} = 1\frac{3}{11}$$

$$\text{c) } \frac{4}{5} + \frac{3}{5} = \frac{7}{5} = 1\frac{2}{5}$$

$$\text{g) } \frac{3}{11} + \frac{3}{11} + \frac{8}{11} = \frac{14}{11} = 1\frac{3}{11}$$

$$\text{d) } \frac{8}{5} + \frac{6}{5} = \frac{14}{5} = 2\frac{4}{5}$$

$$\text{h) } \frac{3}{7} + \frac{3}{7} + \frac{8}{7} = \frac{14}{7} = 2$$

4

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

What could the missing numerators be?

Give four different possibilities.

e.g.  $\frac{1}{4} + \frac{8}{4} = \frac{9}{4}$

$$\frac{3}{4} + \frac{6}{4} = \frac{9}{4}$$

$$\frac{2}{4} + \frac{7}{4} = \frac{9}{4}$$

$$\frac{4}{4} + \frac{5}{4} = \frac{9}{4}$$

- 5 Tommy is adding fractions.



$$\frac{3}{4} + \frac{3}{4} = \frac{6}{8}$$

Explain why Tommy is incorrect.



He has added the denominators when he shouldn't have. Each whole is still split into quarters so  
 $\frac{3}{4} + \frac{3}{4} = \frac{6}{4}$

## Prove It!

Complete the number sentences.

a)  $\frac{3}{8} + \frac{\boxed{4}}{8} = \frac{7}{8}$

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

b)  $\frac{3}{8} + \frac{\boxed{5}}{8} = 1$

f)  $\frac{4}{9} + \frac{\boxed{12}}{9} = \frac{\boxed{16}}{9} = 1\frac{7}{9}$

c)  $\frac{3}{16} + \frac{\boxed{13}}{\boxed{16}} = 1$

g)  $\frac{5}{7} + \frac{\boxed{4}}{7} + \frac{5}{7} = 2$

d)  $\frac{4}{9} + \frac{\boxed{7}}{9} = \frac{11}{9} = 1\frac{\boxed{2}}{9}$

h)  $\frac{5}{7} + \frac{\boxed{11}}{7} + \frac{5}{7} = 3$



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?

km

b) Jack also went for a walk.

Altogether the four children walked 3 km.

How far did Jack walk?

km

Tuesday

1 Complete the subtractions.



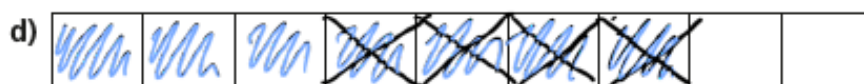
$$\frac{4}{5} - \frac{1}{5} = \boxed{\frac{3}{5}}$$



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



$$\frac{5}{7} - \frac{3}{7} = \boxed{\frac{2}{7}}$$



$$\frac{7}{9} - \frac{4}{9} = \boxed{\frac{3}{9}}$$

2 Complete the calculations.

$$\text{a) } \frac{7}{10} - \frac{3}{10} = \boxed{\frac{4}{10}}$$

$$\text{e) } \frac{9}{11} - \frac{3}{11} = \boxed{\frac{6}{11}}$$

$$\text{b) } \frac{2}{3} - \frac{1}{3} = \boxed{\frac{1}{3}}$$

$$\text{f) } \frac{6}{7} - \frac{4}{7} = \boxed{\frac{2}{7}}$$

$$\text{c) } \frac{6}{6} - \frac{6}{6} = \boxed{0}$$

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

$$\text{d) } \frac{3}{4} - \frac{1}{4} = \boxed{\frac{2}{4}}$$

$$\text{h) } \frac{10}{991} - \frac{3}{991} = \boxed{\frac{7}{991}}$$

3 Complete the subtractions

$$\text{a) } \frac{9}{5} - \frac{6}{5} = \boxed{\frac{3}{5}}$$

$$\text{e) } \frac{8}{3} - \frac{4}{3} = \boxed{\frac{4}{3}} = \boxed{1\frac{1}{3}}$$

$$\text{b) } \frac{9}{5} - \frac{5}{5} = \boxed{\frac{4}{5}}$$

$$\text{f) } \frac{11}{3} - \frac{4}{3} = \boxed{\frac{7}{3}} = \boxed{2\frac{1}{3}}$$

$$\text{c) } \frac{9}{5} - \frac{4}{5} = \boxed{\frac{5}{5}} = \boxed{1}$$

$$\text{g) } \frac{14}{3} - \frac{4}{3} = \boxed{\frac{10}{3}} = \boxed{3\frac{1}{3}}$$

$$\text{d) } \frac{9}{2} - \frac{4}{2} = \boxed{\frac{5}{2}} = \boxed{2\frac{1}{2}}$$

$$\text{h) } \frac{15}{3} - \frac{5}{3} = \boxed{\frac{10}{3}} = \boxed{3\frac{1}{3}}$$

4 Jack has  $2\frac{1}{4}$  kg of potatoes.

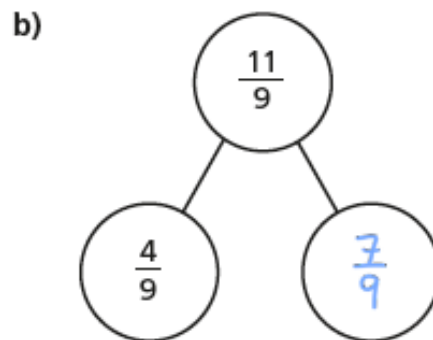
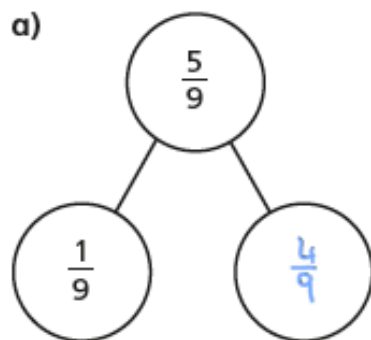
He uses  $\frac{5}{4}$  kg of potatoes.

How many kilograms does he have left?

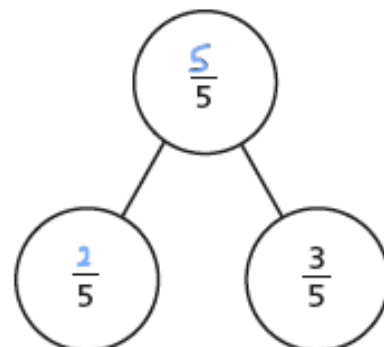
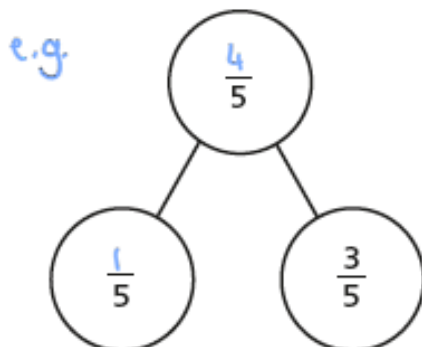


Jack has  kg left.

5 Complete the part-whole models.



6 Complete the part-whole model in two different ways.



# Prove It!

Fill in the missing numerators.

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

$$\text{d) } \frac{15}{4} - \frac{\boxed{7}}{4} = 2$$

$$\text{b) } \frac{10}{11} - \frac{\boxed{7}}{11} = \frac{7}{11} - \frac{4}{11}$$

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

$$\text{c) } \frac{10}{11} - \frac{4}{11} = \frac{\boxed{13}}{11} - \frac{7}{11}$$

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



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?

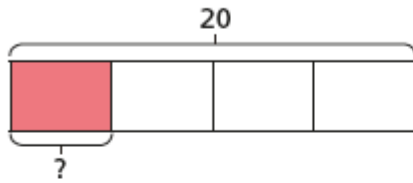
$$\boxed{3\frac{3}{4}} \text{ hours}$$



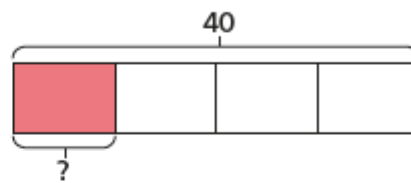
Wednesday

1 Complete the number sentences.

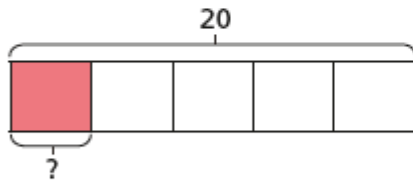
a)  $\frac{1}{4}$  of 20 =



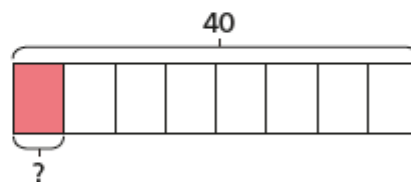
d)  $\frac{1}{4}$  of 40 =



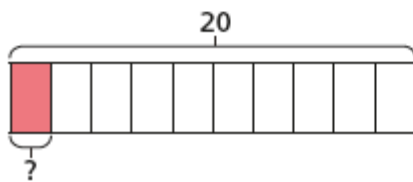
b)  $\frac{1}{5}$  of 20 =



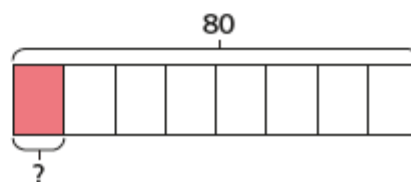
e)  $\frac{1}{8}$  of 40 =



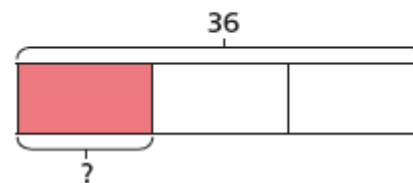
c)  $\frac{1}{10}$  of 20 =



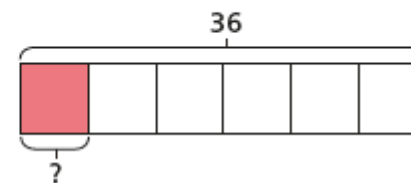
f)  $\frac{1}{8}$  of 80 =



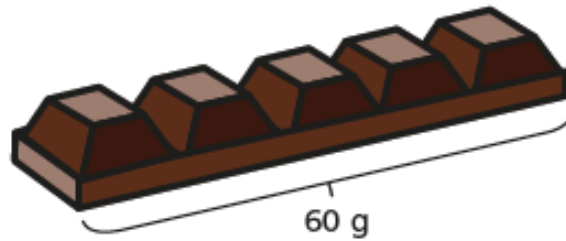
g)  $\frac{1}{3}$  of 36 =



h)  $\frac{1}{6}$  of 36 =



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

- 3 Complete the number sentences.

a)  $\frac{1}{4}$  of 24 =

c)  $\frac{1}{8}$  of 32 =

$\frac{3}{4}$  of 24 =

$\frac{5}{8}$  of 32 =

b)  $\frac{1}{7}$  of 35 =

d)  $\frac{5}{8}$  of 64 =

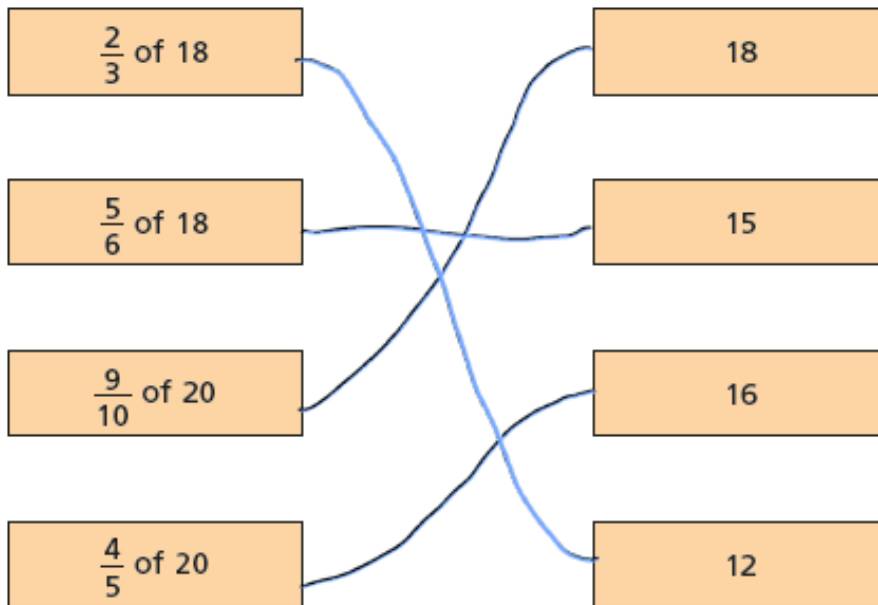
$\frac{3}{7}$  of 35 =

$\frac{7}{8}$  of 64 =

$\frac{5}{7}$  of 35 =

$\frac{10}{8}$  of 64 =

4 Match the calculations to the answers.



## Prove It!

a) Write each calculation in the correct circle.

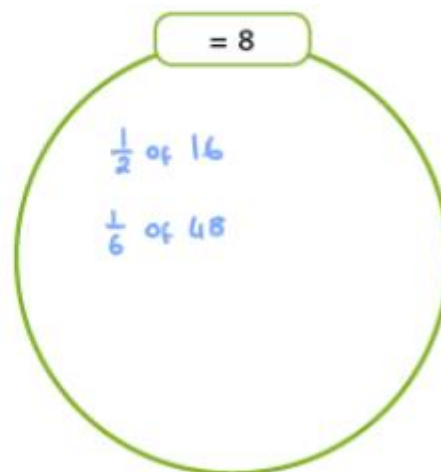
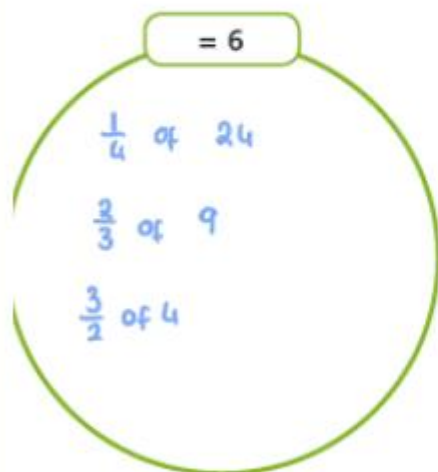
$\frac{1}{2}$  of 16

$\frac{1}{4}$  of 24

$\frac{2}{3}$  of 9

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

$\frac{1}{6}$  of 48



b) Write one more calculation in each circle.



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

Thursday

1 Match the calculations to the bar models.

Work out the missing quantities.

$\frac{1}{4}$  of  $\boxed{20}$  = 5

$\frac{1}{4}$  of  $\boxed{16}$  = 4

$\frac{1}{5}$  of  $\boxed{25}$  = 5

$\frac{1}{3}$  of  $\boxed{12}$  = 4

Bar Model 1: Red square bracket: 5, Bar bracket: ?

Bar Model 2: Red square bracket: 4, Bar bracket: ?

Bar Model 3: Red square bracket: 4, Bar bracket: ?

Bar Model 4: Red square bracket: 5, Bar bracket: ?

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

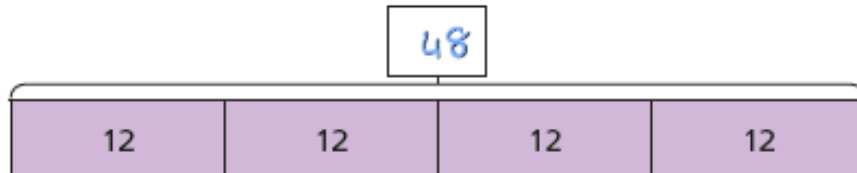
b) When  $\frac{1}{7}$  is 2, the whole is

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

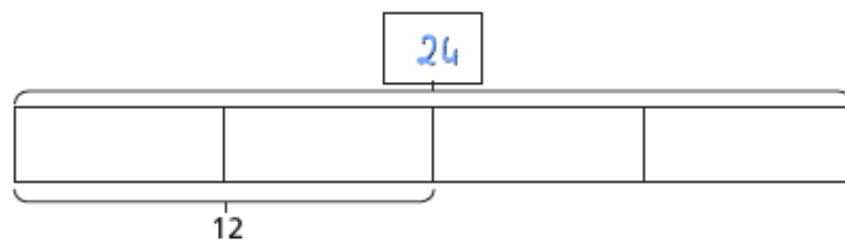
When  $\frac{1}{7}$  is 8, the whole is

3 Complete the bar models and fill in the whole.

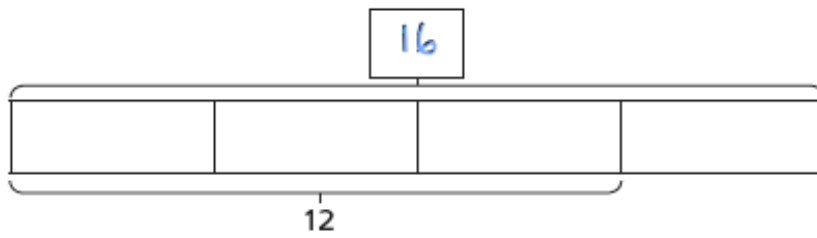
a)



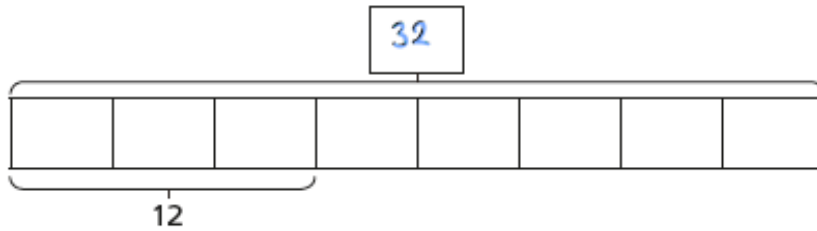
b)



c)



d)



4

Complete the calculations.

a)  $\frac{1}{2}$  of  = 30

e)  $\frac{3}{7}$  of  = 15

b)  $\frac{1}{2}$  of  = 15

f)  $\frac{5}{7}$  of  = 15

c)  $\frac{1}{4}$  of  = 15

g)  $\frac{5}{7}$  of  = 35

d)  $\frac{3}{4}$  of  = 15

h)  $\frac{7}{5}$  of  = 35

# Prove It!

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?

375 ml



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.

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



Ron

a) How many counters does Ron have altogether?

16

b) How many red counters do they each have?

Rosie has 6 red counters.

Ron has 4 red counters.