

## Problem solving – fractions of amounts

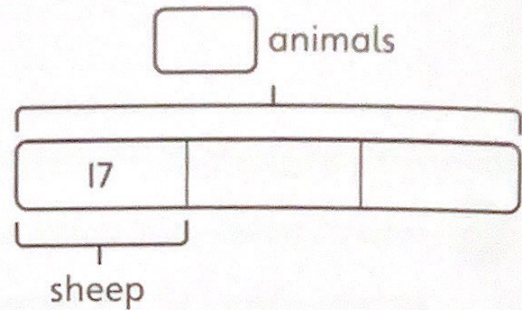
- 1  $\frac{1}{3}$  of the animals in a field are sheep. There are 17 sheep in the field.

How many animals are in the field?

17 sheep =  $\frac{1}{3}$  of the animals

$$17 \times \square = \square$$

There are  $\square$  animals in the field.



- 2  $\frac{5}{6}$  of a number is 60. What is the number?



- 3 Danny spends  $\frac{2}{5}$  of his pocket money on a magazine. The magazine costs £3. How much pocket money does he get?



- 4 Last week, Toshi spent £42 on a food shop. This is  $\frac{1}{7}$  of his weekly wage. Holly spent £54. This is  $\frac{2}{9}$  of her weekly wage.

Who earns more money per week? How much more?



- 5 Use a diagram to work out the missing numbers.

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

c)  $180 = \frac{9}{10}$  of

b)  $\frac{3}{4}$  of  = 48

d)  $\frac{1}{6}$  of  =  $\frac{2}{3}$  of 27



- 6 Zac is thinking of a number. What number is Zac thinking of?



$\frac{3}{8}$  of my number is 2.4.

Zac



CHALLENGE

- 7 a) On Monday, Alex reads  $\frac{1}{4}$  of a book. On Tuesday, she reads  $\frac{3}{5}$  of the book. She has 18 pages left to read. How many pages are in her book?



- b) On Monday, Lee reads  $\frac{1}{4}$  of a book. On Tuesday, he reads  $\frac{3}{5}$  of the remaining pages. He has 18 pages left to read. How many pages are there in Lee's book?



## Reflect

$$\frac{3}{4} \text{ of } 60 = \boxed{\phantom{000}} \qquad \frac{3}{4} \text{ of } \boxed{\phantom{000}} = 60$$

What is the same? What is different? Work out the missing numbers.




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