

Monday

FRACTIONS OF QUANTITIES 1

67

TARGET To find fractions of numbers and quantities.

Examples

$$\frac{1}{3} \text{ of } 15 = 15 \div 3 = 5$$



$$\frac{2}{3} \text{ of } 15 = (15 \div 3) \times 2 = 5 \times 2 = 10$$

$$\frac{7}{10} \text{ of } 60 = (60 \div 10) \times 7 = 6 \times 7 = 42$$

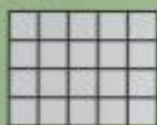
A

Use the array to help you find the answer.



1  $\frac{1}{3}$  of 18

2  $\frac{1}{6}$  of 18



3  $\frac{1}{4}$  of 20

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

Find  $\frac{1}{10}$  of:

5 40

7 60

6 100

8 90

Find  $\frac{1}{5}$  of:

9 15

11 30

10 40

12 55

Find  $\frac{1}{3}$  of:

13 12

15 15

14 24

16 36

Find  $\frac{1}{4}$  of:

17 24

19 40

18 16

20 28

Step 1

• Divide by the denominator.

Step 2

• Times by the numerator.  
Today it's just x by 1!

Example

$$\frac{1}{5} \text{ of } 30 = 30 \div 5 = 6$$

$$= 6 \times 1 = 6$$

$$= 6$$

Write your answers on paper and send a photo to your teacher on Class Dojo!

## FRACTIONS OF QUANTITIES 2

**TARGET** To find fractions of numbers and quantities.

Examples

$$\frac{1}{3} \text{ of } 15 = 15 \div 3 \\ = 5$$



$$\frac{2}{3} \text{ of } 15 = (15 \div 3) \times 2 \\ = 5 \times 2 \\ = 10$$

$$\frac{7}{10} \text{ of } 60 = (60 \div 10) \times 7 \\ = 6 \times 7 \\ = 42$$

### Step 1

• Divide by the denominator.

### Step 2

• Multiply by the numerator.

Show your working and answers on paper. Then, send a photo to your teacher on Class Dojo!

**B**

Find

- |                        |                         |
|------------------------|-------------------------|
| 1 $\frac{1}{3}$ of 24  | 9 $\frac{5}{8}$ of 16   |
| 2 $\frac{2}{3}$ of 24  | 10 $\frac{2}{3}$ of 30  |
| 3 $\frac{1}{4}$ of 12  | 11 $\frac{5}{6}$ of 24  |
| 4 $\frac{3}{4}$ of 12  | 12 $\frac{3}{4}$ of 36  |
| 5 $\frac{1}{5}$ of 25  | 13 $\frac{4}{7}$ of 35  |
| 6 $\frac{4}{5}$ of 25  | 14 $\frac{3}{10}$ of 70 |
| 7 $\frac{1}{10}$ of 30 | 15 $\frac{7}{12}$ of 36 |
| 8 $\frac{9}{10}$ of 30 | 16 $\frac{2}{5}$ of 45  |
- 17 There are 12 eggs in a box. Five sixths are used. How many eggs have been used?
- 18 An orchard has 48 trees. Three eighths are in bud. How many trees are in bud?
- 19 A hospital has 400 beds. Ninety-nine hundredths are occupied. How many beds are occupied?
- 20 There are 27 children in a class. Eight ninths are at school. How many children are at school?

Numerator

Denominator

Example

$$\frac{4}{7} \text{ of } 35$$

Step 1

$$\frac{4}{7} \text{ of } 35 = 35 \div 7 = 5$$

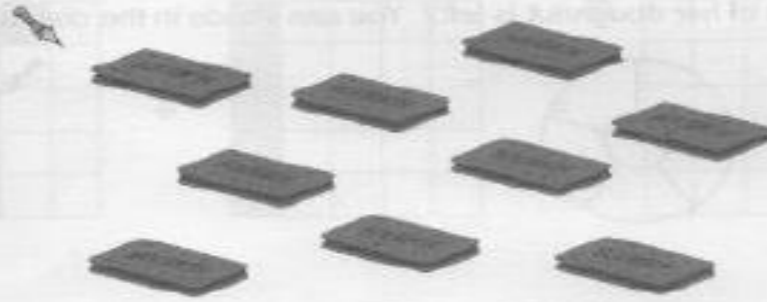
Step 2

$$5 \times 4 = 20$$

$$\frac{4}{7} \text{ of } 35 = 20$$

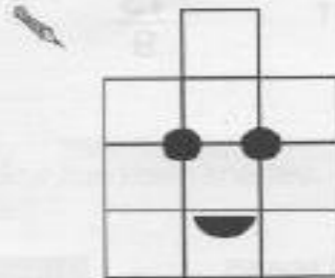
## Fractions of Amounts

1 Circle  $\frac{2}{3}$  of the biscuits below.



1 mark

2 This robot head is made up of ten equal squares. Shade in  $\frac{4}{5}$  of its head.



1 mark

3 What is  $\frac{1}{5}$  of 40?

1 mark

4 What is  $\frac{2}{6}$  of 30? Circle the correct answer.

5                  10                  12                  20

1 mark

## Fractions of Amounts

5 Fill in the boxes to complete the sentences.

$\frac{1}{4}$  of 16 is , so  $\frac{3}{4}$  of 16 is .

1 mark

$\frac{1}{10}$  of 50 is , so  $\frac{7}{10}$  of 50 is .

1 mark

6 What is four tenths of 100?



1 mark

7 There are 27 prizes to be won at a fairground game.

$\frac{2}{3}$  of the prizes are teddy bears. How many teddy bears are there?

teddy bears

1 mark

8 Ameena likes  $\frac{1}{5}$  of the songs on her sister's playlist.

There are 35 songs on the playlist. How many songs does Ameena **not** like?

songs

1 mark

"I can solve problems that involve calculating fractions of amounts."



**FRACTIONS OF QUANTITIES 3**

**TARGET** To find fractions of quantities.

*Examples*

$$\begin{aligned} \frac{5}{100} \text{ of } 600 \text{ g} &= (600 \text{ g} \div 100) \times 5 \\ &= 6 \text{ g} \times 5 \\ &= 30 \text{ g} \end{aligned}$$

$$\begin{aligned} \frac{4}{5} \text{ of } \text{£}90 &= (\text{£}90 \div 5) \times 4 \\ &= \text{£}18 \times 4 \\ &= \text{£}72 \end{aligned}$$

**A**

Find  $\frac{1}{10}$  of:

- 1 50
- 2 80
- 3 100 g
- 4 30 m

Find  $\frac{1}{3}$  of:

- 5 60
- 6 25
- 7 50
- 8 35

Find  $\frac{1}{3}$  of:

- 9 30
- 10 21
- 11 £27
- 12 18 cm

Find  $\frac{1}{8}$  of:

- 13 32
- 14 56
- 15 40 mm
- 16 80 kg

- 17 How many minutes are there in one tenth of an hour?
- 18 A packet of ham weighs 200 g. One fifth is eaten. How much is left?
- 19 There are 100 beads on a necklace. One quarter are red. How many red beads are there?
- 20 There are sixty flowers in a display. One third are marigolds. How many are not marigolds?



Numerator

Denominator

Step 1

• Divide by the denominator.

Step 2

• Multiply by the numerator.

Just x 1 today. *minutes*

Step 3

• Add the units. *£ kg mm cm*

Show your working and answers on paper. Then, send a photo to your teacher on Class Dojo!

**TARGET** To find fractions of quantities.

*Examples*

$$\begin{aligned}\frac{5}{100} \text{ of } 600 \text{ g} &= (600 \div 100) \times 5 \\ &= 6 \text{ g} \times 5 \\ &= 30 \text{ g}\end{aligned}$$

$$\begin{aligned}\frac{4}{5} \text{ of } \text{£}90 &= (\text{£}90 \div 5) \times 4 \\ &= \text{£}18 \times 4 \\ &= \text{£}72\end{aligned}$$

Show your working and answers on paper. Then, send a photo to your teacher on Class Dojo!

**B**

Find

- 1  $\frac{3}{10}$  of 20 cm
- 2  $\frac{4}{7}$  of 14p
- 3  $\frac{5}{12}$  of £72
- 4  $\frac{7}{10}$  of 30 kg
- 5  $\frac{3}{8}$  of 80 g
- 6  $\frac{2}{3}$  of 24 litres
- 7  $\frac{3}{4}$  of 28p
- 8  $\frac{9}{100}$  of 400 ml
- 9  $\frac{5}{8}$  of £48
- 10  $\frac{4}{9}$  of 45 km
- 11 A roll of cling film is 24 m long. Seven eighths is used. How much is left?
- 12 A packet of cereal weighs 750 g. Three fifths has been used. How much has been used?
- 13 There are 30 safety pins in a packet. Five sixths are used. How many are left?
- 14 There are 180 spaces in a car park. Nine tenths are taken. How many cars are in the car park?

Numerator

Denominator

Example

$$\frac{4}{7} \text{ of } 35 \text{ p}$$

Step 1

$$\frac{4}{7} \text{ of } 35 \text{ p} = 35 \div 7 = 5$$

Step 2

$$5 \times 4 = 20$$

$$\frac{4}{7} \text{ of } 35 = 20 \text{ p}$$

Step 3

Add the units!