

11+ Maths Practice Paper

Year 6 · Advanced

Lesson 3.5: Fractions of amounts

Read this with your child:

1. This paper has **27 questions** in two parts. Work through them in order. The questions get harder as you go.
2. **Part 1** is multiple choice. Choose **one** answer, A, B, C, D or E, and mark it on the separate answer sheet by drawing a firm line through the box next to its letter. If you change your mind, rub the line out completely and mark your new answer.
3. **Part 2** asks you to write your answer. Write it in the boxes on the answer sheet, **one digit in each box**, starting from the left.
4. If a question is hard, leave it and come back to it at the end.
5. You may use rough paper for working out. You may **not** use a calculator.
6. Suggested time: **35 minutes**.

The answer sheet is after the questions. The answers, with a short explanation of each, are at the back for a parent to mark with.

These are original practice questions written by Elite Learners in the style of 11+ entrance tests. They are not produced by, or connected with, GL Assessment or Cambridge University Press & Assessment (CEM).

Example

$\frac{5}{6}$ of a number is 40.

What is the number?

A 33

B 40

C 48

D 8

E 54

Answer: C 5 parts are 40, so one part is $40 \div 5 = 8$. The whole is 6 parts: $8 \times 6 = 48$.

The answer, C, has already been marked on your answer sheet.

Now turn over and start Part 1.

Part 1: Multiple choice

1

What is $\frac{7}{9}$ of 162?

- A 18 B 140 C 108 D 144 E 126

2

Ella spends $\frac{3}{8}$ of her money. She has £35 left.

How much did she have to start with?

- A £21 B £56 C £93 D £13 E £45

3

What is $\frac{3}{4}$ of $\frac{2}{3}$ of 60?

- A 45 B 10 C 20 D 30 E 40

4

A farmer has 96 sheep. He sells $\frac{1}{4}$ of them, then $\frac{1}{3}$ of the sheep that are left.

How many sheep does he have now?

- A 48 B 56 C 40 D 24 E 72

5

How many minutes are in $\frac{5}{12}$ of 3 hours?

- A 25 minutes B 15 minutes C 75 minutes D 125 minutes E 60 minutes

6

$\frac{2}{7}$ of the pupils in a school are in Year 6. There are 48 pupils in Year 6.

How many pupils are in the school?

- A 96 B 336 C 120 D 168 E 140

7

What is the difference between $\frac{3}{5}$ of 75 and $\frac{4}{9}$ of 81?

- A 81 B 45 C 36 D 11 E 9

8

A rope is cut into two pieces. One piece is $\frac{3}{7}$ of the rope and is 24 m long.

How long is the other piece?

- A** 32 m **B** 56 m **C** 18 m **D** 8 m **E** 24 m
-

9

What is $\frac{7}{20}$ of £1?

- A** 7p **B** 20p **C** 35p **D** 70p **E** 13p
-

10

There are 120 cars in a car park. $\frac{3}{5}$ of them are red and $\frac{1}{4}$ of them are blue.

How many cars are neither red nor blue?

- A** 102 **B** 18 **C** 48 **D** 30 **E** 90
-

11

$\frac{5}{8}$ of a number is 45.

What is the number?

- A** 9 **B** 28 **C** 45 **D** 81 **E** 72
-

12

How many hours are in $\frac{7}{12}$ of a day?

- A** 7 hours **B** 12 hours **C** 35 hours **D** 14 hours **E** 10 hours
-

13

Max is given £60. He saves $\frac{1}{3}$ of it, then spends $\frac{1}{4}$ of the rest.

How much does he spend?

- A** £15 **B** £10 **C** £20 **D** £30 **E** £25
-

14

Which of these is the largest?

- A** $\frac{2}{3}$ of 72 **B** $\frac{3}{4}$ of 60 **C** $\frac{5}{8}$ of 64 **D** $\frac{4}{5}$ of 55 **E** $\frac{7}{10}$ of 60
-

15

$\frac{3}{4}$ of $\frac{1}{2}$ of a number is 18.

What is the number?

A 27

B 24

C 48

D 36

E 54

16

A tank is $\frac{2}{5}$ full. When 36 more litres are added, it is full.

How many litres does the tank hold?

A 90

B 60

C 36

D 48

E 72

17

Amy has 84 beads. $\frac{2}{7}$ of them are red, and $\frac{1}{4}$ of the rest are blue.

How many beads are blue?

A 15

B 21

C 24

D 60

E 12

18

Sam has £150. He spends $\frac{2}{5}$ of it on a coat and $\frac{1}{3}$ of it on shoes.

How much does he have left?

A £110

B £90

C £60

D £50

E £40

19

$\frac{4}{9}$ of a number is 36 more than $\frac{1}{9}$ of the number.

What is the number?

A 81

B 36

C 144

D 108

E 72

20

Lily scores $\frac{7}{8}$ of the marks in a test. She scores 63 marks.

How many marks was the test out of?

A 56

B 64

C 72

D 81

E 70

Part 2: Write your answer

21

What is $\frac{9}{11}$ of 132?

Write your answer in the boxes on the answer sheet, one digit in each box.

22

$\frac{6}{7}$ of a number is 54.

What is the number?

Write your answer in the boxes on the answer sheet, one digit in each box.

23

How many minutes are in $\frac{11}{12}$ of an hour?

Write your answer in the boxes on the answer sheet, one digit in each box.

24

A school has 240 pupils. $\frac{5}{8}$ of them walk to school and $\frac{1}{6}$ of them come by bus.

How many pupils come to school another way?

Write your answer in the boxes on the answer sheet, one digit in each box.

25

$\frac{3}{10}$ of a number is 27.

What is $\frac{7}{10}$ of the same number?

Write your answer in the boxes on the answer sheet, one digit in each box.

26

Ben spends $\frac{1}{4}$ of his money, then $\frac{1}{3}$ of what is left. He has £30 left.

How many pounds did he have to start with?

Write your answer in the boxes on the answer sheet, one digit in each box.

27

What is $\frac{2}{3}$ of $\frac{3}{4}$ of 248?

Write your answer in the boxes on the answer sheet, one digit in each box.

Answer sheet

11+ Maths Practice Paper · Year 6 · Lesson 3.5: Fractions of amounts

Name

Draw a firm line through the box next to your answer, like the example.

Part 1: Multiple choice

Ex	A ☐	B ☐	C ☒	D ☐	E ☐
1	A ☐	B ☐	C ☐	D ☐	E ☐
2	A ☐	B ☐	C ☐	D ☐	E ☐
3	A ☐	B ☐	C ☐	D ☐	E ☐
4	A ☐	B ☐	C ☐	D ☐	E ☐
5	A ☐	B ☐	C ☐	D ☐	E ☐
6	A ☐	B ☐	C ☐	D ☐	E ☐
7	A ☐	B ☐	C ☐	D ☐	E ☐
8	A ☐	B ☐	C ☐	D ☐	E ☐
9	A ☐	B ☐	C ☐	D ☐	E ☐
10	A ☐	B ☐	C ☐	D ☐	E ☐
11	A ☐	B ☐	C ☐	D ☐	E ☐
12	A ☐	B ☐	C ☐	D ☐	E ☐
13	A ☐	B ☐	C ☐	D ☐	E ☐
14	A ☐	B ☐	C ☐	D ☐	E ☐
15	A ☐	B ☐	C ☐	D ☐	E ☐
16	A ☐	B ☐	C ☐	D ☐	E ☐
17	A ☐	B ☐	C ☐	D ☐	E ☐
18	A ☐	B ☐	C ☐	D ☐	E ☐
19	A ☐	B ☐	C ☐	D ☐	E ☐
20	A ☐	B ☐	C ☐	D ☐	E ☐

Part 2: Write your answer, one digit in each box

21			
22			
23			
24			
25			
26			
27			

Answers

For a parent to mark with. One mark for each question: the paper is out of 27. Talk through any your child got wrong, using the explanation.

Q	Answer	How to get it
1	E 126	$162 \div 9 = 18$, and $18 \times 7 = 126$.
2	B £56	She has $\frac{5}{8}$ left, so 5 parts are £35 and one part is £7. The whole is 8 parts: £56.
3	D 30	$\frac{2}{3}$ of 60 = 40. Then $\frac{3}{4}$ of 40 = 30.
4	A 48	$\frac{1}{4}$ of 96 = 24, leaving 72. $\frac{1}{3}$ of 72 = 24, leaving 48.
5	C 75 minutes	3 hours = 180 minutes. $180 \div 12 = 15$, and $15 \times 5 = 75$ minutes.
6	D 168	2 parts are 48, so one part is 24. The whole school is 7 parts: $24 \times 7 = 168$.
7	E 9	$\frac{3}{5}$ of 75 = 45 and $\frac{4}{9}$ of 81 = 36. $45 - 36 = 9$.
8	A 32 m	3 parts are 24 m, so one part is 8 m. The other piece is the other 4 parts: $8 \times 4 = 32$ m.
9	C 35p	$100p \div 20 = 5p$, and $5p \times 7 = 35p$.
10	B 18	$\frac{3}{5}$ of 120 = 72 red and $\frac{1}{4}$ of 120 = 30 blue. $72 + 30 = 102$, so $120 - 102 = 18$.
11	E 72	5 parts are 45, so one part is 9. The whole is 8 parts: 72.
12	D 14 hours	A day is 24 hours. $24 \div 12 = 2$, and $2 \times 7 = 14$ hours.
13	B £10	He saves $\frac{1}{3}$ of £60 = £20, leaving £40. $\frac{1}{4}$ of £40 = £10.
14	A $\frac{2}{3}$ of 72	They are 48, 45, 40, 44 and 42. $\frac{2}{3}$ of 72 = 48 is the largest.
15	C 48	$\frac{3}{4}$ of half the number is 18, so a quarter of the half is 6 and the half is 24. The number is 48.
16	B 60	The 36 litres fill the other $\frac{3}{5}$. One fifth is 12 litres, so the tank holds $12 \times 5 = 60$ litres.
17	A 15	$\frac{2}{7}$ of 84 = 24 are red, leaving 60. $\frac{1}{4}$ of 60 = 15 are blue.
18	E £40	$\frac{2}{5}$ of £150 = £60 and $\frac{1}{3}$ of £150 = £50. He spends £110, so £40 is left.
19	D 108	The difference is $\frac{3}{9}$, which is 36. So $\frac{1}{9}$ is 12 and the number is $12 \times 9 = 108$.
20	C 72	7 parts are 63, so one part is 9. The whole test is 8 parts: 72 marks.
21	108	$132 \div 11 = 12$, and $12 \times 9 = 108$.
22	63	6 parts are 54, so one part is 9. The whole is 7 parts: 63.
23	55	$60 \div 12 = 5$, and $5 \times 11 = 55$ minutes.
24	50	$\frac{5}{8}$ of 240 = 150 walk and $\frac{1}{6}$ of 240 = 40 come by bus. $240 - 190 = 50$.
25	63	3 parts are 27, so one part is 9. Then 7 parts are $9 \times 7 = 63$.
26	60	After spending $\frac{1}{4}$, he has $\frac{3}{4}$. Spending $\frac{1}{3}$ of that leaves $\frac{2}{3}$ of $\frac{3}{4}$, which is $\frac{1}{2}$. Half is £30, so he started with £60.

Q	Answer	How to get it
27	124	$\frac{3}{4}$ of 248 = 186. Then $\frac{2}{3}$ of 186 = 124.

Score: out of 27