

11+ Maths Practice Paper

Year 4 · Foundation

Lesson 4.1: Direct proportion and scaling

Read this with your child:

1. This paper has **20 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: **25 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

1 pencil costs 20p. How much do 3 pencils cost?

A 23p

B 60p

C 40p

D 80p

E 50p

Answer: B 3 pencils cost 3 times as much: $3 \times 20\text{p} = 60\text{p}$.

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

Now turn over and start Part 1.

Part 1: Multiple choice

1

A box holds 4 cakes.

How many cakes are in 3 boxes?

- A** 7 **B** 8 **C** 16 **D** 15 **E** 12

2

1 apple costs 30p.

How much do 4 apples cost?

- A** 34p **B** 90p **C** £1.50 **D** £12 **E** £1.20

3

2 bags of sweets cost £6.

How much does 1 bag cost?

- A** £4 **B** £3 **C** £12 **D** £8 **E** £2

4

A recipe for 2 people uses 150 g of pasta.

How much pasta is needed for 4 people?

- A** 300 g **B** 152 g **C** 200 g **D** 600 g **E** 450 g

5

A recipe for 4 people uses 6 eggs.

How many eggs are needed for 2 people?

- A** 4 **B** 12 **C** 3 **D** 2 **E** 8

6

Which of these is in direct proportion?

- A** a taxi fare that costs £3 to get in, then £2 a mile
B your age and your height
C a deal: 1 cake for £2, 2 cakes for £3
D the height of a candle and how long it has burned
E the number of stamps and their cost, at 85p each

7

1 box holds 5 pens, and 2 boxes hold 10 pens.

How many pens are in 6 boxes?

- A** 11 **B** 30 **C** 25 **D** 35 **E** 15
-

8

3 tickets cost £15.

How much does 1 ticket cost?

- A** £12 **B** £5 **C** £18 **D** £45 **E** £3
-

9

A tap fills 8 litres every minute.

How many litres does it fill in 5 minutes?

- A** 13 litres **B** 35 litres **C** 40 litres **D** 45 litres **E** 48 litres
-

10

A recipe for 4 people uses 200 g of flour.

How much flour is needed for 12 people?

- A** 208 g **B** 400 g **C** 800 g **D** 600 g **E** 2400 g
-

11

5 rubbers cost £2.

How much do 10 rubbers cost?

- A** £7 **B** £2.50 **C** £20 **D** £4 **E** £5
-

12

4 bags of crisps cost £2.

How much do 6 bags cost?

- A** £4 **B** £2.50 **C** £3 **D** £12 **E** £3.50
-

13

A recipe for 6 people uses 300 ml of milk.

How much milk is needed for 3 people?

- A** 150 ml **B** 297 ml **C** 600 ml **D** 100 ml **E** 200 ml

14

A pack of 5 pens costs £1.25.

What is the price of 1 pen?

- A** 25p **B** 20p **C** 30p **D** 50p **E** £6.25

15

Every spider has 8 legs.

How many legs do 7 spiders have?

- A** 15 **B** 48 **C** 64 **D** 56 **E** 54

Part 2: Write your answer

16

1 sticker costs 6p.

How many pence do 9 stickers cost?

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

17

A box holds 6 eggs.

How many eggs are in 7 boxes?

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

18

A recipe for 2 people uses 125 g of rice.

How many grams of rice are needed for 6 people?

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

19

5 bags hold 60 marbles altogether. Each bag holds the same number.

How many marbles are in 1 bag?

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

20

3 books cost £12. Each book costs the same.

How many pounds do 7 books cost?

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

Answer sheet

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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 ☐

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

16			
17			
18			
19			
20			

Answers

For a parent to mark with. One mark for each question: the paper is out of 20. Talk through any your child got wrong, using the explanation.

Q	Answer	How to get it
1	E 12	3 boxes hold 3 times as many: $3 \times 4 = 12$.
2	E £1.20	$4 \times 30\text{p} = 120\text{p}$, which is £1.20.
3	B £3	Halve it: $£6 \div 2 = £3$.
4	A 300 g	4 people is double 2 people, so double the pasta: $150 \times 2 = 300\text{ g}$.
5	C 3	2 people is half of 4 people, so halve the eggs: $6 \div 2 = 3$.
6	E the number of stamps and their cost, at 85p each	Double the stamps and the cost doubles. The taxi has a starting charge, the deal is not in step, and the candle gets shorter.
7	B 30	6 boxes hold 6 times as many as 1 box: $6 \times 5 = 30$.
8	B £5	Divide by 3: $£15 \div 3 = £5$.
9	C 40 litres	$5 \times 8 = 40$ litres.
10	D 600 g	12 people is 3 times 4 people, so $200 \times 3 = 600\text{ g}$.
11	D £4	10 is double 5, so double the cost: $£2 \times 2 = £4$.
12	C £3	1 bag costs $200\text{p} \div 4 = 50\text{p}$, so 6 bags cost $6 \times 50\text{p} = 300\text{p}$, which is £3.
13	A 150 ml	3 people is half of 6 people: $300 \div 2 = 150\text{ ml}$.
14	A 25p	Work in pence: $125 \div 5 = 25\text{p}$.
15	D 56	$7 \times 8 = 56$.
16	54	$9 \times 6 = 54\text{p}$.
17	42	$7 \times 6 = 42$.
18	375	6 people is 3 times 2 people: $125 \times 3 = 375\text{ g}$.
19	12	$60 \div 5 = 12$.
20	28	1 book costs $£12 \div 3 = £4$, so 7 books cost $7 \times £4 = £28$.

Score: out of 20