

11+ Maths Practice Paper

Year 5 · Intermediate

Lesson 3.8: Percentage changes

Read this with your child:

1. This paper has **24 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: **30 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

Decrease 60 by 15%.

A 45

B 51

C 9

D 69

E 75

Answer: B 10% of 60 is 6 and 5% is 3, so 15% is 9, and $60 - 9 = 51$.

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

Now turn over and start Part 1.

Part 1: Multiple choice

1

Increase 40 by 5%.

- A** 45 **B** 2 **C** 38 **D** 42 **E** 60
-

2

Decrease 120 by 15%.

- A** 102 **B** 105 **C** 18 **D** 138 **E** 108
-

3

A shop takes 35% off every price.

What percentage of the old price do you pay?

- A** 35% **B** 135% **C** 65% **D** 75% **E** 55%
-

4

Increase 300 by 1%.

- A** 301 **B** 330 **C** 3 **D** 297 **E** 303
-

5

A football costs £18. In a sale it has 10% off.

What is the sale price?

- A** £1.80 **B** £16.20 **C** £19.80 **D** £8 **E** £16.80
-

6

Decrease 80 by 75%.

- A** 60 **B** 5 **C** 20 **D** 140 **E** 25
-

7

Sam earns £300 a week. Sam gets a pay rise of 2%.

How much does Sam earn each week now?

- A** £306 **B** £302 **C** £360 **D** £6 **E** £294
-

8

Increase 60 by 35%.

A 21

B 95

C 39

D 81

E 78

9

20% of a number is 14. What is the number?

A 28

B 140

C 7

D 56

E 70

10

A jacket costs £40. In a sale it has 15% off.

What is the sale price?

A £6

B £34

C £25

D £46

E £36

11

Everything in a shop is 90% off.

How much does a £70 scooter cost now?

A £7

B £63

C £60

D £9

E £77

12

Decrease £24 by 5%.

A £1.20

B £19

C £22.80

D £23.80

E £25.20

13

A village has 500 people. The number of people grows by 12%.

How many people live in the village now?

A 512

B 60

C 440

D 560

E 620

14

Increase £35 by 20%.

A £7

B £42

C £55

D £28

E £37

15

30% of a number is 27. What is the number?

A 81

B 9

C 57

D 270

E 90

16

A bag costs £16. Its price goes up by 25%.

What is the new price?

A £20

B £4

C £41

D £12

E £16.25

17

Which of these leaves the largest answer?

A Decrease 60 by 20%

B Decrease 50 by 10%

C Decrease 80 by 50%

D Decrease 100 by 75%

E Decrease 70 by 30%

18

After 10% off, a book costs £9.

What did the book cost before?

A £9.90

B £8.10

C £10

D £19

E £11

Part 2: Write your answer

19

Increase 200 by 15%.

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

20

Decrease 400 by 3%.

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

21

Decrease 64 by 75%.

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

22

A bike costs £180. In a sale it has 5% off.

What is the sale price, in pounds?

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

23

40% of a number is 36. What is the number?

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

24

A cinema had 250 visitors on Friday. On Saturday it had 20% more.

How many visitors did it have on Saturday?

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

Answer sheet

11+ Maths Practice Paper · Year 5 · Lesson 3.8: Percentage changes

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 ☐

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

19			
20			
21			
22			
23			
24			

Answers

For a parent to mark with. One mark for each question: the paper is out of 24. Talk through any your child got wrong, using the explanation.

Q	Answer	How to get it
1	D 42	10% of 40 is 4, so 5% is 2, and $40 + 2 = 42$.
2	A 102	10% of 120 is 12 and 5% is 6, so 15% is 18, and $120 - 18 = 102$.
3	C 65%	The old price is 100%. $100\% - 35\% = 65\%$.
4	E 303	1% of 300 is $300 \div 100 = 3$, and $300 + 3 = 303$.
5	B £16.20	10% of £18 is £1.80, and $£18 - £1.80 = £16.20$.
6	C 20	$100\% - 75\%$ leaves 25%. 25% of 80 is a quarter of 80, which is 20.
7	A £306	1% of £300 is £3, so 2% is £6, and $£300 + £6 = £306$.
8	D 81	10% of 60 is 6, so 30% is 18; 5% is 3, so 35% is 21, and $60 + 21 = 81$.
9	E 70	20% is 2 blocks of 10%, so 10% is $14 \div 2 = 7$. The number is $7 \times 10 = 70$.
10	B £34	10% of £40 is £4 and 5% is £2, so 15% is £6, and $£40 - £6 = £34$.
11	A £7	You pay $100\% - 90\% = 10\%$ of the price. 10% of £70 is £7.
12	C £22.80	10% of £24 is £2.40, so 5% is £1.20, and $£24 - £1.20 = £22.80$.
13	D 560	10% of 500 is 50 and 1% is 5, so 12% is $50 + 5 + 5 = 60$, and $500 + 60 = 560$.
14	B £42	10% of £35 is £3.50, so 20% is £7, and $£35 + £7 = £42$.
15	E 90	30% is 3 blocks of 10%, so 10% is $27 \div 3 = 9$. The number is $9 \times 10 = 90$.
16	A £20	25% of £16 is a quarter of £16, which is £4, and $£16 + £4 = £20$.
17	E Decrease 70 by 30%	Decrease 70 by 30% leaves 49. The others leave 48, 45, 40 and 25.
18	C £10	£9 is 90% of the price before: 9 blocks of 10%. One block is $£9 \div 9 = £1$, so 100% is £10.
19	230	10% of 200 is 20 and 5% is 10, so 15% is 30, and $200 + 30 = 230$.
20	388	1% of 400 is 4, so 3% is 12, and $400 - 12 = 388$.
21	16	$100\% - 75\%$ leaves 25%. A quarter of 64 is 16.
22	171	10% of £180 is £18, so 5% is £9, and $£180 - £9 = £171$.
23	90	40% is 4 blocks of 10%, so 10% is $36 \div 4 = 9$. The number is $9 \times 10 = 90$.
24	300	10% of 250 is 25, so 20% is 50, and $250 + 50 = 300$.

Score: out of 24