

11+ Maths Practice Paper

Year 6 · Advanced

Lesson 2.3: Short and long division

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

Work out this division.

$$\begin{array}{r} 24 \overline{) 5712} \end{array}$$

A 228

B 237

C 248

D 238

E 2,308

Answer: D 24 into 57 is 2 (48), remainder 9. Bring down 1: 91, which is 3 (72), remainder 19. Bring down 2: 192, which is 8 (192). So 238.

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

Now turn over and start Part 1.

Part 1: Multiple choice

1

Work out this division.

$$\begin{array}{r} 8 \overline{) 8136} \end{array}$$

- A** 117 **B** 1,107 **C** 1,017 **D** 1,170 **E** 1,016

2

Work out this division.

$$\begin{array}{r} 15 \overline{) 6045} \end{array}$$

- A** 403 **B** 43 **C** 430 **D** 413 **E** 402

3

Work out this division.

$$\begin{array}{r} 34 \overline{) 7906} \end{array}$$

- A** 232 r 8 **B** 231 r 52 **C** 233 r 18 **D** 222 r 18 **E** 232 r 18

4

What is $37 \div 8$ as a decimal?

- A** 4.5 **B** 4.625 **C** 4.58 **D** 4 r 5 **E** 4.65

5

Work out this division.

$$\begin{array}{r} 25 \overline{) 4575} \end{array}$$

- A** 173 **B** 193 **C** 182 **D** 183 **E** 1,803

6

What is $101 \div 6$, with the remainder written as a fraction?

A $16\frac{5}{6}$

B 16.5

C $16\frac{6}{5}$

D $17\frac{5}{6}$

E $16\frac{1}{6}$

7

A school orders 650 exercise books. They come in packs of 24.

How many packs must the school order?

A 27

B 27 r 2

C 28

D 26

E 29

8

Work out this division.

$$\begin{array}{r} 41 \overline{) 9348} \end{array}$$

A 218

B 227

C 238

D 2,028

E 228

9

What is the missing digit?

$$\begin{array}{r} 129 \\ 6 \overline{) 7 \boxed{?} 4} \end{array}$$

A 6

B 8

C 2

D 7

E 4

10

£74 is shared equally between 8 people.

How much does each person get?

A £9.20

B £9.25

C £9.30

D £9 r 2

E £9.50

11

A number is divided by 23. The answer is 41 remainder 17.

What is the number?

A 943

B 926

C 984

D 977

E 960

12

Work out this division.

$$\begin{array}{r} 27 \overline{) 2187} \end{array}$$

- A 801 B 80 r 27 C 71 D 81 E 82

13

Which of these divisions has a remainder of 3?

- A $87 \div 4$ B $75 \div 7$ C $64 \div 5$ D $58 \div 8$ E $95 \div 6$

14

Work out this division.

$$\begin{array}{r} 16 \overline{) 4512} \end{array}$$

- A 272 B 281 C 282 D 292 E 2,802

15

A machine fills bottles with 75 ml of juice each. It has 2,000 ml of juice.

How many bottles can it fill?

- A 27 B 26 C 26 r 50 D 25 E 50

16

What is $157 \div 25$ as a decimal?

- A 6.7 B 6.07 C 6 r 7 D 6.25 E 6.28

17

Work out this division.

$$\begin{array}{r} 52 \overline{) 8060} \end{array}$$

A 145

B 154

C 165

D 155

E 1,505

18

What is the missing digit?

$$\begin{array}{r} 554 \\ 18 \overline{) 9 \boxed{?} 72} \end{array}$$

A 7

B 9

C 8

D 0

E 5

19

What is $2,350 \div 7$, with the remainder written as a fraction?A $335 \frac{5}{7}$

B 335.5

C $336 \frac{5}{7}$ D $335 \frac{7}{5}$ E $335 \frac{2}{7}$

20

Work out this division.

$$\begin{array}{r} 78 \overline{) 9984} \end{array}$$

A 118

B 127

C 128

D 138

E 1,208

Part 2: Write your answer

21

Work out this division.

$$9 \overline{) 6174}$$

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

22

Work out this division.

$$14 \overline{) 8442}$$

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

23

Work out this division.

$$39 \overline{) 9516}$$

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

24

What is the remainder when 5,000 is divided by 37?

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

25

1,250 people need tickets. Tickets come in books of 36.

How many books are needed?

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

26

A number is divided by 48. The answer is 125 remainder 11.

What is the number?

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

27

Work out this division.

$$\begin{array}{r} 63 \overline{) 7875} \end{array}$$

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

Answer sheet

11+ Maths Practice Paper · Year 6 · Lesson 2.3: Short and long division

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	C 1,017	8 into 8 is 1. 8 into 1 does not go: write 0, carry 1: 13, which is 1 r 5. Carry 5: 56, which is 7. So 1,017.
2	A 403	15 into 60 is 4. 15 into 4 does not go: write 0 and bring down the 5: 45. 15 into 45 is 3. So 403.
3	E 232 r 18	34 into 79 is 2 (68), remainder 11. Bring down 0: 110, which is 3 (102), remainder 8. Bring down 6: 86, which is 2 (68), remainder 18. So 232 r 18.
4	B 4.625	$37 \div 8 = 4 \text{ r } 5$. Keep dividing: 50 tenths $\div 8 = 6 \text{ r } 2$, 20 hundredths $\div 8 = 2 \text{ r } 4$, 40 thousandths $\div 8 = 5$. So 4.625.
5	D 183	25 into 45 is 1, remainder 20. Bring down 7: 207, which is 8 (200), remainder 7. Bring down 5: 75, which is 3. So 183.
6	A $16 \frac{5}{6}$	$101 \div 6 = 16 \text{ r } 5$. The 5 left over is shared between 6, which is $\frac{5}{6}$. So $16 \frac{5}{6}$.
7	C 28	$650 \div 24 = 27 \text{ r } 2$. Twenty-seven packs are 2 books short, so round up: 28 packs.
8	E 228	41 into 93 is 2 (82), remainder 11. Bring down 4: 114, which is 2 (82), remainder 32. Bring down 8: 328, which is 8 (328). So 228.
9	D 7	Multiply back: $129 \times 6 = 774$. So the missing digit is 7.
10	B £9.25	$74 \div 8 = 9 \text{ r } 2$, but money can be split into pence. Keep dividing: $74.00 \div 8 = 9.25$. So £9.25 each.
11	E 960	Multiply back and add the remainder: $41 \times 23 = 943$, and $943 + 17 = 960$.
12	D 81	27 into 218 is 8 (216), remainder 2. Bring down 7: 27, which is 1. So 81. (80 r 27 is wrong: a remainder must be smaller than 27.)
13	A $87 \div 4$	$87 \div 4 = 21 \text{ r } 3$. The others are $10 \text{ r } 5$, $12 \text{ r } 4$, $7 \text{ r } 2$ and $15 \text{ r } 5$.
14	C 282	16 into 45 is 2 (32), remainder 13. Bring down 1: 131, which is 8 (128), remainder 3. Bring down 2: 32, which is 2. So 282.
15	B 26	$2,000 \div 75 = 26 \text{ r } 50$. The 50 ml left over will not fill another bottle, so round down: 26.
16	E 6.28	$157 \div 25 = 6 \text{ r } 7$. Keep dividing: 70 tenths $\div 25 = 2 \text{ r } 20$, and 200 hundredths $\div 25 = 8$. So 6.28.
17	D 155	52 into 80 is 1, remainder 28. Bring down 6: 286, which is 5 (260), remainder 26. Bring down 0: 260, which is 5. So 155.
18	B 9	Multiply back: $554 \times 18 = 9,972$. So the missing digit is 9.
19	A $335 \frac{5}{7}$	$2,350 \div 7 = 335 \text{ r } 5$. The 5 left over is shared between 7, which is $\frac{5}{7}$. So $335 \frac{5}{7}$.
20	C 128	78 into 99 is 1, remainder 21. Bring down 8: 218, which is 2 (156), remainder 62. Bring down 4: 624, which is 8. So 128.

Q	Answer	How to get it
21	686	Carry 6: 61, which is 6 r 7. Carry 7: 77, which is 8 r 5. Carry 5: 54, which is 6. So 686.
22	603	14 into 84 is 6. 14 into 4 does not go: write 0 and bring down 2: 42. 14 into 42 is 3. So 603.
23	244	39 into 95 is 2 (78), remainder 17. Bring down 1: 171, which is 4 (156), remainder 15. Bring down 6: 156, which is 4. So 244.
24	5	37 into 50 is 1, remainder 13. Bring down 0: 130, which is 3 (111), remainder 19. Bring down 0: 190, which is 5 (185), remainder 5. So $5,000 \div 37 = 135 \text{ r } 5$.
25	35	$1,250 \div 36 = 34 \text{ r } 26$. Thirty-four books are 26 tickets short, so round up: 35 books.
26	6,011	$125 \times 48 = 6,000$, and $6,000 + 11 = 6,011$.
27	125	63 into 78 is 1, remainder 15. Bring down 7: 157, which is 2 (126), remainder 31. Bring down 5: 315, which is 5. So 125.

Score: out of 27