

11+ Maths Practice Paper

Year 4 · Foundation

Lesson 2.1: Column addition and subtraction puzzles

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

Work out this addition.

$$\begin{array}{r} 352 \\ + 214 \\ \hline \\ \hline \end{array}$$

A 556

B 566

C 576

D 466

E 138

Answer: B Add each column from the ones: $2 + 4 = 6$, $5 + 1 = 6$, $3 + 2 = 5$. So 566.

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

Now turn over and start Part 1.

Part 1: Multiple choice

1

Work out this addition.

$$\begin{array}{r} 423 \\ + 365 \\ \hline \\ \hline \end{array}$$

A 788

B 798

C 778

D 688

E 58

2

Work out this subtraction.

$$\begin{array}{r} 768 \\ - 345 \\ \hline \\ \hline \end{array}$$

A 413

B 433

C 423

D 1,113

E 323

3

Work out this addition.

$$\begin{array}{r} 457 \\ + 238 \\ \hline \\ \hline \end{array}$$

A 685

B 695

C 615

D 795

E 219

4

Ella sets out $2,345 + 61$ in columns.

Which digit of 2,345 should the 1 in 61 be written under?

- A 2
- B 3
- C 4
- D 5
- E It does not matter

5

Work out this subtraction.

$$\begin{array}{r} 652 \\ - 327 \\ \hline \end{array}$$

- A 335
- B 315
- C 425
- D 979
- E 325

6

Work out this addition.

$$\begin{array}{r} 3526 \\ + 1247 \\ \hline \end{array}$$

- A 4,763
- B 4,673
- C 4,773
- D 4,783
- E 2,279

7

Which calculation can you use to check that $845 - 296 = 549$?

- A $549 + 296$
- B $845 + 296$
- C $549 - 296$
- D $845 + 549$
- E $549 + 549$

8

What is the missing number? $? + 34 = 92$

- A 126
- B 68
- C 62
- D 48
- E 58

9

Work out this subtraction.

$$\begin{array}{r} 4385 \\ - 2162 \\ \hline \\ \hline \end{array}$$

A 2,233

B 2,223

C 2,123

D 6,547

E 2,222

10

Work out this addition.

$$\begin{array}{r} 6748 \\ + 2586 \\ \hline \\ \hline \end{array}$$

A 8,224

B 9,324

C 9,234

D 9,334

E 4,162

11

Work out this subtraction.

$$\begin{array}{r} 7315 \\ - 2841 \\ \hline \\ \hline \end{array}$$

A 5,534

B 5,574

C 4,574

D 10,156

E 4,474

12

What is the missing digit?

$$\begin{array}{r} 3 \boxed{?} 6 \\ + 241 \\ \hline 617 \\ \hline \end{array}$$

A 7

B 3

C 4

D 8

E 6

13

What is the missing number? $? - 125 = 348$

A 223

B 463

C 573

D 473

E 483

14

Work out this subtraction.

$$\begin{array}{r} 900 \\ - 347 \\ \hline \end{array}$$

A 647

B 663

C 553

D 653

E 1,247

15

Work out this subtraction.

$$\begin{array}{r} 4006 \\ - 1238 \\ \hline \end{array}$$

A 3,232

B 2,768

C 3,878

D 2,878

E 5,244

Part 2: Write your answer

16

Work out this addition.

$$\begin{array}{r} 2457 \\ + 3186 \\ \hline \end{array}$$

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

17

Work out this subtraction.

$$\begin{array}{r} 8253 \\ - 4617 \\ \hline \\ \hline \end{array}$$

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

18

Work out this subtraction.

$$\begin{array}{r} 503 \\ - 268 \\ \hline \\ \hline \end{array}$$

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

19

What is the missing number? $1,000 - ? = 456$

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

20

What is the missing digit?

$$\begin{array}{r} 42\boxed{?}8 \\ + 1563 \\ \hline 5851 \\ \hline \end{array}$$

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	A 788	Ones: $3 + 5 = 8$. Tens: $2 + 6 = 8$. Hundreds: $4 + 3 = 7$. So 788.
2	C 423	Ones: $8 - 5 = 3$. Tens: $6 - 4 = 2$. Hundreds: $7 - 3 = 4$. So 423.
3	B 695	Ones: $7 + 8 = 15$. Write 5, carry 1. Tens: $5 + 3 + 1 = 9$. Hundreds: $4 + 2 = 6$. So 695.
4	D 5	Line up from the right: ones under ones. The 1 is a ones digit, so it goes under the 5.
5	E 325	Ones: $2 - 7$ cannot be done, so exchange 1 ten: $12 - 7 = 5$. Tens: $4 - 2 = 2$. Hundreds: $6 - 3 = 3$. So 325.
6	C 4,773	Ones: $6 + 7 = 13$. Write 3, carry 1. Tens: $2 + 4 + 1 = 7$. Hundreds: $5 + 2 = 7$. Thousands: $3 + 1 = 4$. So 4,773.
7	A $549 + 296$	Check a subtraction by adding: the answer plus the number taken away should make the starting number. $549 + 296 = 845$.
8	E 58	Undo the adding: $92 - 34 = 58$. Check: $58 + 34 = 92$.
9	B 2,223	No exchanges are needed. Ones: $5 - 2 = 3$. Tens: $8 - 6 = 2$. Hundreds: $3 - 1 = 2$. Thousands: $4 - 2 = 2$. So 2,223.
10	D 9,334	Ones: $8 + 6 = 14$, carry 1. Tens: $4 + 8 + 1 = 13$, carry 1. Hundreds: $7 + 5 + 1 = 13$, carry 1. Thousands: $6 + 2 + 1 = 9$. So 9,334.
11	E 4,474	Ones: $5 - 1 = 4$. Tens: $1 - 4$, so exchange: $11 - 4 = 7$. Hundreds: $2 - 8$, so exchange: $12 - 8 = 4$. Thousands: $6 - 2 = 4$. So 4,474.
12	A 7	Ones: $6 + 1 = 7$. Tens: $? + 4$ must end in 1, so $? + 4 = 11$ and $? = 7$, with 1 carried. Hundreds: $3 + 2 + 1 = 6$. So $376 + 241 = 617$.
13	D 473	Undo the taking away: $348 + 125 = 473$. Check: $473 - 125 = 348$.
14	C 553	Ones: $0 - 7$. The tens have nothing to give, so go to the hundreds: 9 becomes 8, the tens become 9 and the ones become 10. $10 - 7 = 3$, $9 - 4 = 5$, $8 - 3 = 5$. So 553.
15	B 2,768	Exchange across both zeros: 4 becomes 3, each zero becomes 9 and the ones become 16. $16 - 8 = 8$, $9 - 3 = 6$, $9 - 2 = 7$, $3 - 1 = 2$. So 2,768.
16	5,643	Ones: $7 + 6 = 13$, carry 1. Tens: $5 + 8 + 1 = 14$, carry 1. Hundreds: $4 + 1 + 1 = 6$. Thousands: $2 + 3 = 5$. So 5,643.
17	3,636	Ones: $13 - 7 = 6$ (after exchanging a ten). Tens: $4 - 1 = 3$. Hundreds: $12 - 6 = 6$ (after exchanging a thousand). Thousands: $7 - 4 = 3$. So 3,636.
18	235	The tens have 0, so exchange from the hundreds: 5 becomes 4, the tens become 9, the ones become 13. $13 - 8 = 5$, $9 - 6 = 3$, $4 - 2 = 2$. So 235.
19	544	The ? is the amount taken away, so it is $1,000 - 456 = 544$. Check: $1,000 - 544 = 456$.

Q	Answer	How to get it
20	8	Ones: $8 + 3 = 11$, carry 1. Tens: $? + 6 + 1$ must end in 5, so $? + 7 = 15$ and $? = 8$. So $4,288 + 1,563 = 5,851$.

Score: out of 20