

SOLVE LETTER SUMS

In these questions, letters stand for numbers.

Work out the answer to each sum, then find its letter and mark it on the answer sheet.

Example If $A = 1$, $B = 2$, $C = 3$, $D = 6$, $E = 8$,
what is the answer to this sum **written as a letter**?

$$A + B + C = [?]$$

A A **B** B **C** C **D** D **E** E

Answer D

Solution In this question, $A = 1$, $B = 2$, $C = 3$, $D = 6$, $E = 8$. If we convert the letters into numbers, the answer to the sum is 6. We can see that $D = 6$, therefore, the answer to this sum written as a letter is **D**.

45

If $A = 2$, $B = 3$, $C = 4$, $D = 5$, $E = 6$,
what is the answer to this sum **written as a letter**?

$$B \times D - E - D = [?]$$

A A **B** B **C** C **D** D **E** E

46

If $A = 2$, $B = 5$, $C = 15$, $D = 23$, $E = 27$,
what is the answer to this sum **written as a letter**?

$$A \times C - B + A = [?]$$

A A **B** B **C** C **D** D **E** E

47

If $A = 1$, $B = 3$, $C = 5$, $D = 15$, $E = 20$,
what is the answer to this sum **written as a letter**?

$$B \times E \div D + A = [?]$$

A A

B B

C C

D D

E E

48

If $A = 3$, $B = 5$, $C = 8$, $D = 9$, $E = 15$,
what is the answer to this sum **written as a letter**?

$$D \times B \div E + B = [?]$$

A A

B B

C C

D D

E E

49

If $A = 6$, $B = 9$, $C = 12$, $D = 27$, $E = 45$,
what is the answer to this sum **written as a letter**?

$$D \div B \times C - B = [?]$$

A A

B B

C C

D D

E E

50

If $A = 3$, $B = 4$, $C = 5$, $D = 6$, $E = 8$,
what is the answer to this sum **written as a letter**?

$$D \times E \div B - B = [?]$$

A A

B B

C C

D D

E E

51

If $A = 3$, $B = 6$, $C = 14$, $D = 28$, $E = 90$,
what is the answer to this sum **written as a letter**?

$$A \times D \div B = [?]$$

A A

B B

C C

D D

E E

Practise using the answer sheet to write your answers to the questions above.

EXAMPLE	45	46	47	48	49	50	51
A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>	A <input type="checkbox"/>
B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>	B <input type="checkbox"/>
C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>	C <input type="checkbox"/>
D <input checked="" type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>	D <input type="checkbox"/>
E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>	E <input type="checkbox"/>

FIND THE NUMBER TO COMPLETE THE SUM

In each question, find the number that will complete the sum correctly and mark it on the answer sheet.

Example $3 + 5 = 6 + [?]$

A 1

B 2

C 3

D 4

E 5

Answer 2

Solution The sum on the right must equal the sum on the left. You have to think of a number to replace the question mark which will make both sides of the sum equal. In this case, the calculation on the left gives us 8, so the question mark must be replaced with the number **2** to also make 8.

61

$$9 \times 2 \div 3 = 7 \times 2 - [?]$$

A 8

B 6

C 4

D 2

E 10

62

$$59 + 27 - 13 = 7 \times 8 + [?]$$

A 16

B 15

C 19

D 17

E 18

63

$$19 \times 5 = 100 \div 2 + [?]$$

A 30

B 50

C 40

D 35

E 45

64

$$81 \div 27 + 36 = 6 \times 7 - [?]$$

A 4

B 7

C 3

D 5

E 2

65

$$125 \div 5 = 8 \times 9 - [?]$$

A 45

B 50

C 32

D 47

E 37

66

$$6 \times 13 - 15 = 18 + 72 - [?]$$

A 23

B 25

C 29

D 31

E 27

67

$$144 \div 6 + 3 = 72 \div 8 + [?]$$

A 18

B 14

C 16

D 12

E 10

EXAMPLE

- 1
- 2
- 3
- 4
- 5

61	8	<input type="checkbox"/>
	6	<input type="checkbox"/>
	4	<input type="checkbox"/>
	2	<input type="checkbox"/>
	10	<input type="checkbox"/>

62	16	<input type="checkbox"/>
	15	<input type="checkbox"/>
	19	<input type="checkbox"/>
	17	<input type="checkbox"/>
	18	<input type="checkbox"/>

63	30	<input type="checkbox"/>
	50	<input type="checkbox"/>
	40	<input type="checkbox"/>
	35	<input type="checkbox"/>
	45	<input type="checkbox"/>

64	4	<input type="checkbox"/>
	7	<input type="checkbox"/>
	3	<input type="checkbox"/>
	5	<input type="checkbox"/>
	2	<input type="checkbox"/>

65	45	<input type="checkbox"/>
	50	<input type="checkbox"/>
	32	<input type="checkbox"/>
	47	<input type="checkbox"/>
	37	<input type="checkbox"/>

66	23	<input type="checkbox"/>
	25	<input type="checkbox"/>
	29	<input type="checkbox"/>
	31	<input type="checkbox"/>
	27	<input type="checkbox"/>

67	18	<input type="checkbox"/>
	14	<input type="checkbox"/>
	16	<input type="checkbox"/>
	12	<input type="checkbox"/>
	10	<input type="checkbox"/>

CRACK THE NUMBER CODE

Three of these four words are given in code.

The codes are **not** written in the same order as the words and one code is missing.

ANTS BASE LETS BLUE
5836 4172 8672

Solution

To answer this sort of question, you have to work out which number represents which letter. Begin by focusing on one number which appears more than once. If this number appears in the same position in two of the codes, you might be able to spot the same pattern with the letters. If not, compare the positions of your chosen letter and see if this is reflected in the words. For example, the number 8 appears in two number codes: once in 1st position (8672) and once in 2nd position (5836). This could either be the letter A or the letter L. Factoring in the positions of the number 6 as well, the number 8 has to stand for the letter L. The number 6 stands for E. Knowing that 5836 = BLUE and 8672 = LETS we can establish what other letters stand for and answer further questions on missing words or codes.

Choose the correct answer and mark it on the answer sheet.

75

Find the code for the word **BASE**.

- A 5836 B 5368 C 5872 D 5462 E 5426

76

Find the code for the word **EAST**.

- A 4627 B 6428 C 6472 D 6427 E 4678

77

Find the word that has the number code **7316**.

- A TUBS B TUNE C TUNA D TANS E TABS

75			
5836	<input type="checkbox"/>		
5368	<input type="checkbox"/>		
5872	<input type="checkbox"/>		
5462	<input type="checkbox"/>		
5426	<input type="checkbox"/>		
76			
4627	<input type="checkbox"/>		
6428	<input type="checkbox"/>		
6472	<input type="checkbox"/>		
6427	<input type="checkbox"/>		
4678	<input type="checkbox"/>		
77			
TUBS	<input type="checkbox"/>		
TUNE	<input type="checkbox"/>		
TUNA	<input type="checkbox"/>		
TANS	<input type="checkbox"/>		
TABS	<input type="checkbox"/>		
78			
3512	<input type="checkbox"/>		
5716	<input type="checkbox"/>		
8621	<input type="checkbox"/>		
3421	<input type="checkbox"/>		
5632	<input type="checkbox"/>		
79			
PEAT	<input type="checkbox"/>		
PEAK	<input type="checkbox"/>		
TEAK	<input type="checkbox"/>		
TANK	<input type="checkbox"/>		
PENT	<input type="checkbox"/>		
80			
3751	<input type="checkbox"/>		
3761	<input type="checkbox"/>		
7351	<input type="checkbox"/>		
7361	<input type="checkbox"/>		
3851	<input type="checkbox"/>		

Three of these four words are given in code.

The codes are **not** written in the same order as the words and one code is missing.

KITE INTO PAIN POET
8457 5716 3512

Solution The same approach applies as for questions 75–77 but this time the numbers have been assigned different letters so we have to repeat the process of assigning letters to numbers. The number 5 appears three times across the number codes: in 1st position, 2nd position and 3rd position. The only letter this could be is I. We can then assign letters to all of the numbers 1–8.

Choose the correct answer and mark it on the answer sheet.

78

Find the code for the word **KITE**.

- A** 3512 **B** 5716 **C** 8621 **D** 3421 **E** 5632

79

Find the word that has the number code **8243**.

- A** PEAT **B** PEAK **C** TEAK **D** TANK **E** PENT

80

Find the code for the word **KNOT**.

- A** 3751 **B** 3761 **C** 7351 **D** 7361 **E** 3851