



Mental and Written Addition and Subtraction

Vocabulary

add, addition, plus, sum, altogether, how many more to make...? subtract, subtraction, minus, take away, difference between, how many more/less than... ?, inverse, powers, indices

Class 6 are trying to find the total of
3,912 and 3,888

Alex



We just need to double
3,900

Is Alex correct? Explain.

$$2,000 - 1,287$$

Dora



I used the column method.

Tommy



I used my number bonds
from 87 to 100 then from
1,300 to 2,000

Jack



I subtracted one from each
number and then used the
column method.

Whose method is most efficient?

What clues tell you that these calculations should be performed mentally?

$2.31 + 15.64$

$243\,561 - 243\,543$

$5.7 + 3.9$

Addition and Subtraction – Mental or Written?

- Work out these calculations without a calculator.
- For each question, decide whether you:
 - Can do it in your head.
 - Need some jottings to help you to get the answer.
 - Need to use a written method.

1. $523 + 98$

2. $436 + 25$

3. $345 + 457 + 789$

4. $716 + 897$

5. $1076 + 57$

6. $674 - 233$

7. $547 - 289$

8. $1784 - 98$

9. $6052 - 1567$

10. $7894 - 8792 + 2358$

Make 200

1 2 3 4 5 6 7 8 9

Choose four of these digits.
Each one must be different.

Put one digit in each box.

This makes two 2-digit numbers reading across
and two 2-digit numbers reading down.

Add up all four of the numbers.

In this example the total is 100.

$$12 + 47 + 14 + 27 = 100$$

1	2
4	7

How many different ways of making 200 can you find?

Teaching objectives

Solve mathematical problems or puzzles.
Know what each digit represents.
Add several two-digit numbers.



83 Make 200

There are 22 different solutions. Eleven of the solutions are as follows:

1	9	2	8	2	9	3	5
7	2	6	3	5	3	7	4

4	1	4	2	4	3	5	1
9	5	8	5	7	5	7	6

6	1	6	2	7	1
5	7	4	7	3	8

Eleven more solutions are formed by changing over the two digits in the top right and bottom left boxes.

Addition and Subtraction – Mental or Written?

- Work out these calculations without a calculator.
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 - 1 ☐ Can do it in your head.
 - 2 ☐ Need some jottings to help you to get the answer.
 - 3 ☐ Need to use a written method.

1. $523 + 98$ ①

2. $436 + 25$ ①

3. $345 + 457 + 789$ ③

4. $716 + 897$ ① / ②

5. $1076 + 57$ ② / ③

6. $674 - 233$ ③

7. $547 - 289$ ②

8. $1784 - 98$ ①

9. $6052 - 1567$ ③

10. $7894 - 8792 + 2358$ ③

621

461

1591

1613

1133

441

258

1686

4485

1460