



THIRD SPACE
LEARNING



$$128\ 500 + 18\ 099$$

HELLO!

Today we are going to learn about
adding and subtracting large numbers

						1
	1	2	8	5	0	0
+		1	8	0	9	9
<hr/>						
	1	4	6	5	9	9
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Warm up for adding and subtracting large numbers

Work these out using column methods.

1. $384 + 895$

2. $7364 - 4509$

Work these out mentally.

3. $458 + 399$

4. $673 - 397$

Name these numbers.

5. 763 690

6. 29 874

Round:

7. 264 581 to the nearest 100 000






8. 578 230 to the nearest 10 000

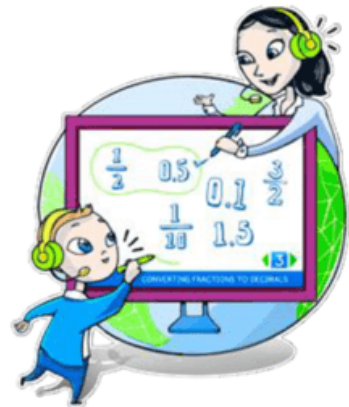


THIRD SPACE
LEARNING

Add and subtract large numbers

In this session, we are going to learn:

-  to use formal methods to add whole numbers with more than four digits
-  to use formal methods to subtract whole numbers with more than four digits
-  to use mental methods to add whole numbers with more than four digits
-  to use mental methods to subtract whole numbers with more than four digits
-  to use rounding to check answers and levels of accuracy



Use formal methods to add whole numbers with more than four digits

Complete this column addition: $237\,478 + 409\,625 + 25\,381$

	100 000s	10 000s	1000s	100s	10s	1s
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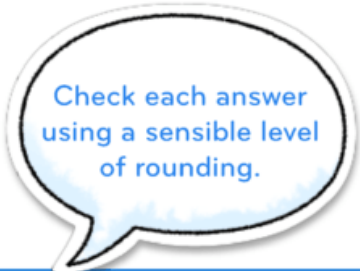
Check your answer by rounding all the numbers to the nearest 100 000.

Use formal methods to add whole numbers with more than four digits

Work these out using column addition.

1. $21\,499 + 28\,561$

2. $3\,769 + 972\,843$



Check each answer using a sensible level of rounding.

Use formal methods to subtract whole numbers with more than four digits

Complete this column subtraction: $743\,735 - 319\,627$

	100 000s	10 000s	1 000s	100s	10s	1s
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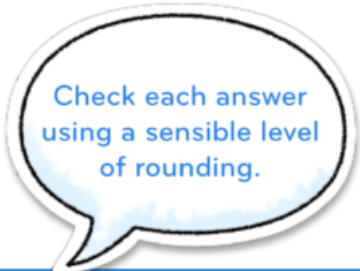
Check your answer
by rounding all the
numbers to the
nearest 100 000.

Use formal methods to subtract whole numbers with more than four digits

Work these out using column subtraction.

1. $478\,453 - 287\,361$

2. $136\,265 - 67\,159$



Check each answer using a sensible level of rounding.

Use mental methods to add whole numbers with more than four digits

I did column addition in my head.



I started with 143 900. I added 21 000. Then I added 500. Then I took away 1.



I added 21 500 to 144 000. Then I took away 101.



$$21\,499 + 143\,900$$

I imagined this as $21\,399 + 144\,000$.



1. Read each method. Which are correct methods?
2. Can you think of another correct method?
3. Try each of the correct methods, as well as your own, in your head.
4. Which method do you prefer?

Use mental methods to add whole numbers with more than four digits

Work out these additions in your head.

Write down the answers.

1. $423\,999 + 50\,001 =$

2. $39\,997 + 29\,950 =$

3. $280\,005 + 9\,997 =$

Use mental methods to subtract whole numbers with more than four digits

I did column subtraction in my head.



I subtracted 52 000 and then I subtracted three more.



I found the difference by working out the difference between 74 000 and 52 000 and then adding 5 and 3.

$$74\ 005 - 51\ 997$$



I imagined this as 74 008 - 52 000.



1. Read each method. Which are correct methods?
2. Can you think of another correct method?
3. Try each of the correct methods, as well as your own, in your head.
4. Which method do you prefer?

Use mental methods to subtract whole numbers with more than four digits

Work out these subtractions in your head.

Write down the answers.

1. $126\,240 - 23\,999 =$

2. $566\,004 - 33\,997 =$

3. $280\,637 - 278\,637 =$

Practice time

Work these out using column methods.

Check each answer by rounding sensibly.

1. $367\,195 + 419\,352$

2. $83\,358 - 47\,539$

Work these out using mental methods.

3. $520\,005 + 199\,997$

4. $257\,371 - 29\,999$

Practice time

5. In one year, a manufacturing business had a total income of **£327 278**. Its total costs were **£256 543**.
How much profit did it make?
6. Describe two mental methods you can use for addition and two you can use for subtraction when column methods are too difficult to do in your head.



Add and subtract large numbers

What have you learned from today's session?



You are learning to add and subtract large numbers