



Adding and Subtracting 3-Digit Numbers Using Different Methods



LO: to use column addition and subtraction methods



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Method	I know how to use it
In my head (counting on and back, using near 10s and 100s or near doubles)	
Adding hundreds, tens and ones horizontally (by partitioning)	
Subtracting hundreds, tens and ones horizontally	
Blank number line (counting on or back in steps)	
Formal column addition	
Formal column subtraction	

Calculate the answers to the following, choosing the most appropriate method. Write the method you use, show any working, and write the answer in your book:

- 1) $376 + 248$
- 2) $782 - 257$
- 3) $892 + 109$
- 4) $490 - 391$
- 5) $582 - 299$
- 6) $701 + 609$
- 7) $378 + 112$
- 8) $872 + 869$
- 9) $723 - 621$
- 10) $459 + 246 + 971$

Challenge

Use the digits 1 to 9 to make three numbers which give the largest total. What is the largest total and how many ways can you do it?



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Adding hundreds, tens and ones horizontally (by partitioning)	
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Calculate the answers to the following, choosing the most appropriate method. Write the method you use, show any working, and write the answer in your book:

- 1) $376 + 248 = 624$
- 2) $782 - 257 = 525$
- 3) $892 + 109 = 1001$
- 4) $490 - 391 = 99$
- 5) $582 - 299 = 283$
- 6) $701 + 609 = 1310$
- 7) $378 + 112 = 490$
- 8) $872 + 869 = 1741$
- 9) $723 - 621 = 102$
- 10) $459 + 246 + 971 = 1676$

Challenge

Use the digits 1 to 9 to make three numbers which give the largest total. What is the largest total and how many ways can you do it?

The 9, 8 and 7 must be in the hundreds; 6, 5 and 4 in the tens and 3, 2, 1 in the ones. The total will be $(900 + 800 + 700 + 60 + 50 + 40 + 3 + 2 + 1 = 2556)$. There are 9 numbers that can be made this way with 900, (963, 962, 961, 953, 952, 951, 943, 942, 941) and for each of these there are 4 ways of making 800 (with 963, there is 852, 851, 842, 841) and for each of these 36 (9×4) ways of making the 900 and 800 there will only be 1 way of making the 700 number. So there are 36 ways of arranging the digits 1-9 to make three 3 digit numbers that add up to the largest number.