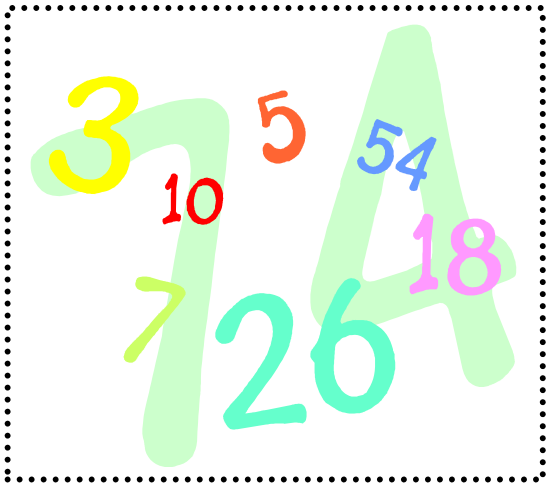
Calculation

I do it my way!

This booklet belongs to ……



Adding What is the best way to do addition?

This way is easy. Partition the numbers and then add tens and ones, or hundreds, tens and ones separately before adding them all together. It works for larger numbers too.

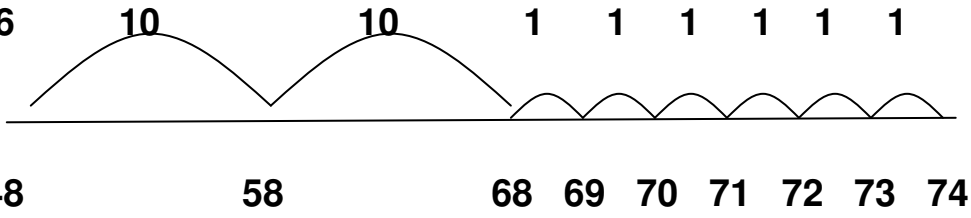
53 + 24 = 50 + 20 + 3 + 4
= 70 + 7
= 77

254 + 138 = 200 + 100 + 50 + 30 + 4 + 8
= 300 + 80 + 12
= 392

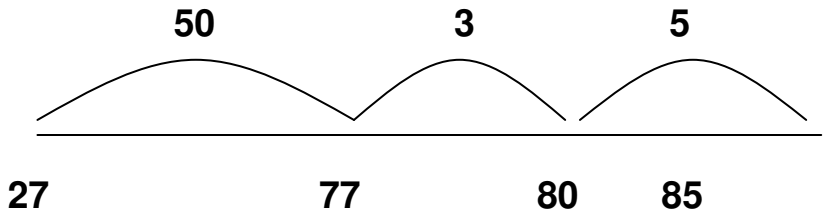
Try one here

Number lines are very easy to use. You can jump in any multiples of 1, 10, 100 or more.

48 +26

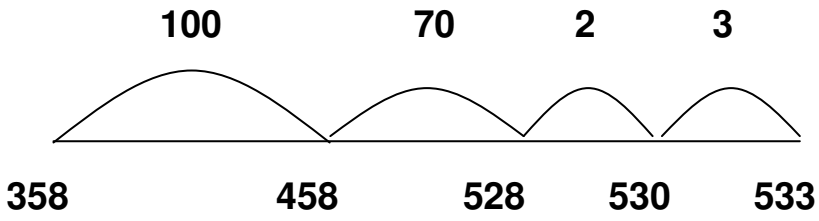


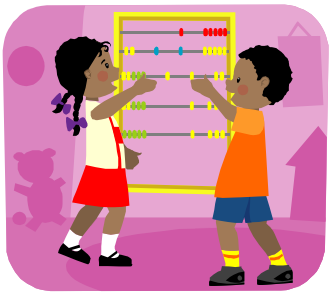
27 + 58 = 85



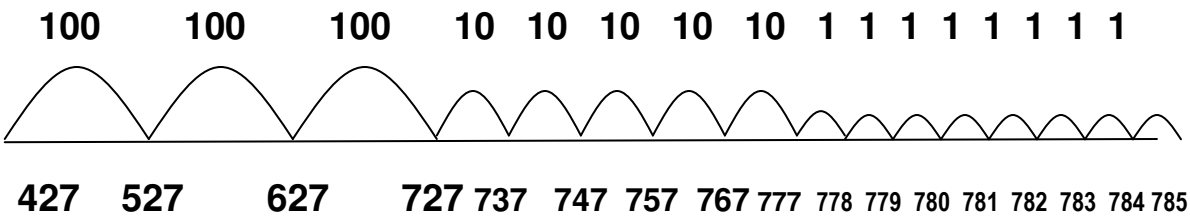
Try a number line

175 + 358 = 534





427 +358

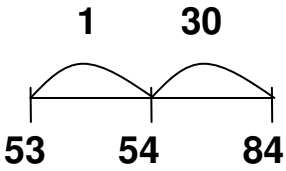


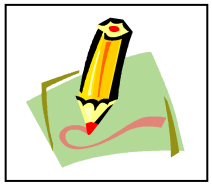
My way to add

Subtracting What is the best way to do subtraction?

Subtraction is either 'take-away', which means counting backwards, or counting on. We use counting on much more often then counting back.
You only use counting back when the numbers to take away are small or very easy.

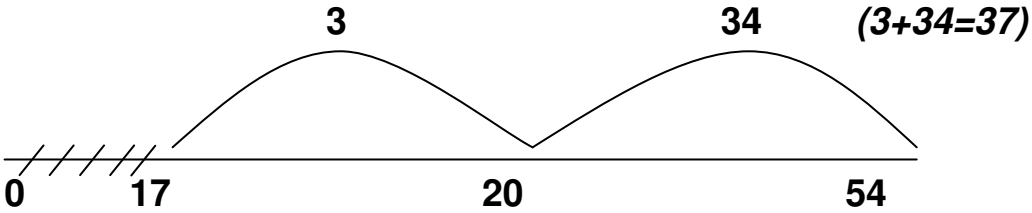
84 – 31= 53



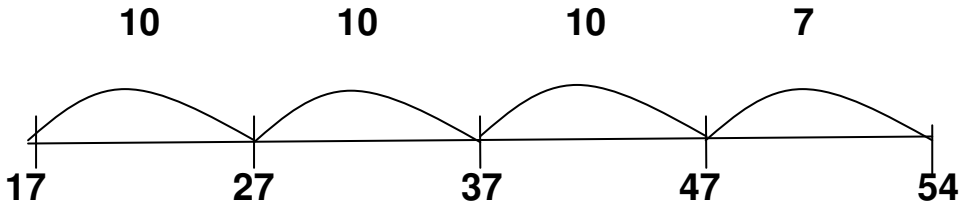


Counting on works for all subtraction calculations.

54 – 17 =
Put 0 and 54 on your number line. Now put in the 18 and cross out 0 to 18, because that is what has been subtracted. Count on. You could count on 2 to get to 20, then 34 to get to 54. That's 36 altogether.



Or you could do the same but count on in steps of 10 and 1.

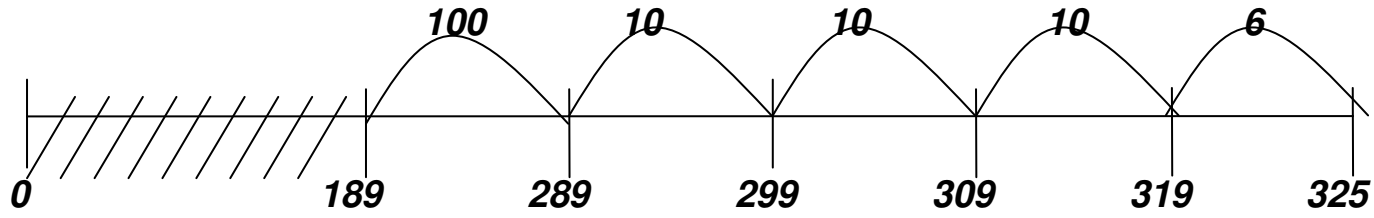


54 – 18 = 36

Try one here

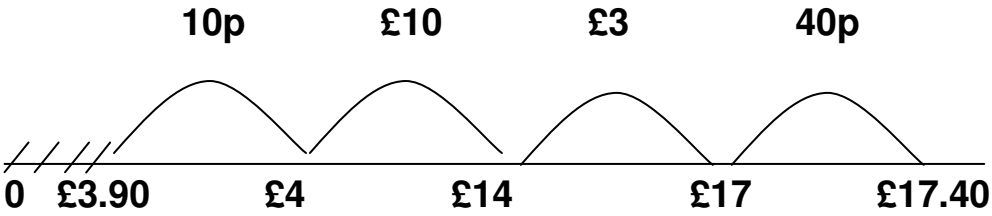
Counting on works for 3-digit numbers and for money as well.

325 - 189



325 – 189 = 100 + 10 + 10 + 10 + 6 = 136

£17.40 – £3.90



£17.40 - £3.90 = £10+£3+10p+40p = £13.50

My way to subtract

Multiplying What is the best way to do multiplication?

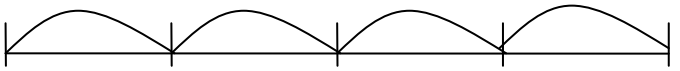
3 x 7 = 3 + 3 + 3 + 3 + 3 + 3 + 3 = 21

0 3 6 9 12 15 18 21

7 x 3 = 7 + 7 + 7

0 7 14 21

14 x 4 = 14 + 14 + 14 + 14 = 56



0 14 28 42 56

Use a grid when you multiply more difficult numbers

24 X 7

X	10	10	4
7	70	70	28

or

X	20	4
7	140	28

24x7 = 140 + 28 = 168

Partition the 24 into 10, 10 and 4, or 20 and 4
Put them in your grid so you can multiply 10 by 7(or 20 by 7) and 4 by 7.
Add together the 70 + 70 + 28, or 140 and 28 to make the product of 168.

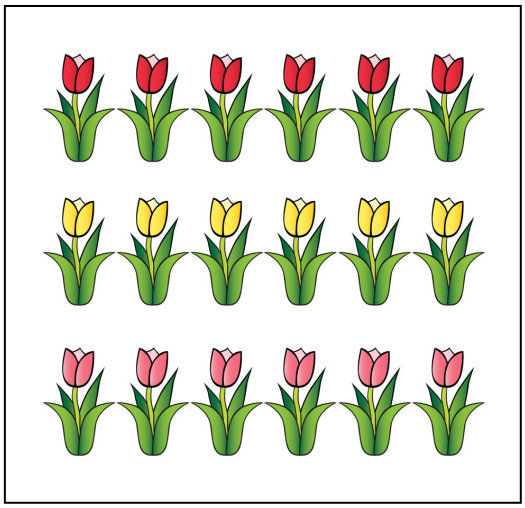
Use a multiplication grid to help you. The more you use it, the more you will remember.

X	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

My way to multiply

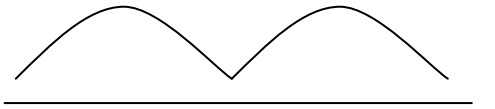
Dividing

What is the best way to do division?



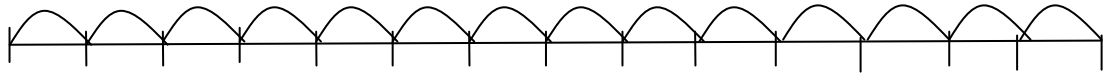
****
****

16 ÷ 8 = 2

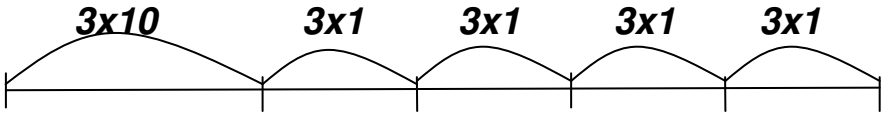


(I start at zero and count in 8s until I get to 16)

To do 42 ÷ 3 I can count on in 3s.



It's easier and quicker to jump 3 x 10 in one jump.

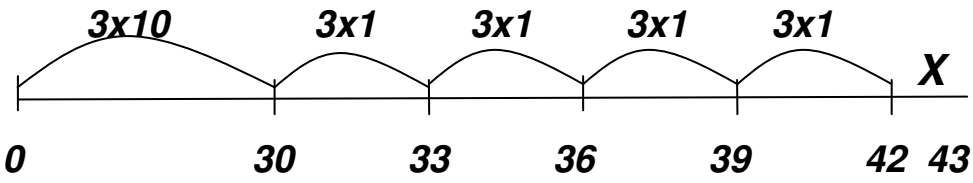


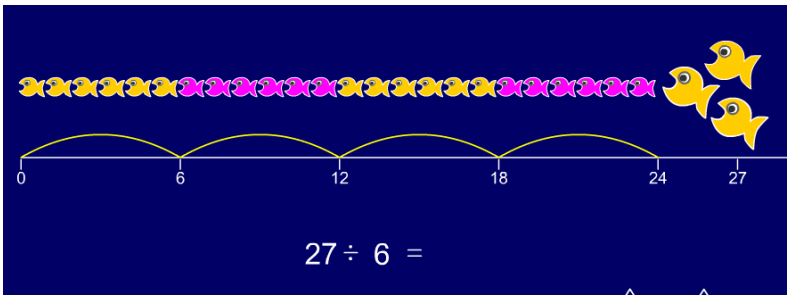
42 ÷ 3 = 14

Try some here

When you divide you sometimes have some left that can't be made into a group. At first we just say '1 left'. Later we call this a remainder.
With only one left, you can't make a group of 3.

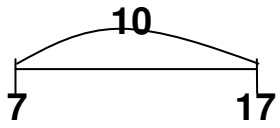
43 ÷ 3 = 14 r 1





My way to divide

Words for calculating

add sum total plus	All these words mean add The sum of 16 and 20 is 36 The total of 63 and 14 is 77 101 plus 102 is 203
subtract minus	These words both mean subtract, but you often find out the answer by counting on, not just by counting back. Adults do this with money all the time. 140 subtract 90 is 50 38 minus 18 is 20
difference	The difference between 17 and 7 is 10. You can also say the difference between 7 and 17 is 10. Difference is the jump between them, so it could be seen as addition or subtraction.  When you use a calculator you find the difference by subtracting. You would do 17 – 7, not 7 – 17, of course - though this would be much too easy to do on a calculator!
multiply product times	10 multiplied by 4 means to have 10 four times. The product of 10 and 4 is 40. xxxxxxxxxx xxxxxxxxxx xxxxxxxxxx xxxxxxxxxx
divide quotient remainder	Division is sharing or grouping. I can share 36 pencils between 4 pupils and they will have 9 each. I can group 36 pencils into 12s, and I will make 3 groups of 12. Sometimes I make equal groups and have some left. This is a remainder.
equation	An equation contains an equals sign = The number statement on either side is equal 82 + 20 = 102 102 = 82 + 20 82 + 20 = 100 + 2 82 + 20 = 51 x 2
estimate	To estimate means to find an answer that is close enough. I estimate that 38 + 36 is between 60 (30 + 30) and 80 (40 + 40)