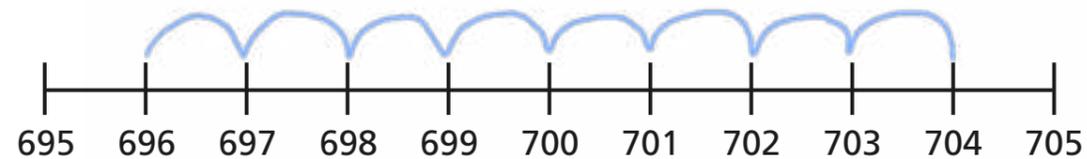


# Efficient subtraction

1 a) Use the column method to work out  $704 - 696$

	H	T	O
	7	0	4
-	6	9	6
	0	0	8

b) Count on the number line to work out  $704 - 696$



c) Which method do you prefer? Why?

Various answers.

2 Complete the subtractions by counting on.

a)  $902 - 897 = \boxed{5}$

b)  $1,902 - 1,894 = \boxed{8}$

c)  $2,027 - 1,999 = \boxed{28}$

3 a) Use column subtraction to complete the calculations.

	H	T	O
	7	0	0
-	3	4	8
	3	5	2

	Th	H	T	O
	6	0	0	0
-	2	1	4	5
	3	8	5	5

What do you notice?

You have to make multiple exchanges in each.

b) Rosie's method

	H	T	O
	6	9	9
-	3	4	8
	3	5	1

$$351 + 1 = 352$$

$$\text{so } 700 - 348 = 352$$

Use Rosie's method to work out  $6,000 - 2,145$

	5	9	9	9	3	8	5	4	+ 1	=	3	8	5	5
-	2	1	4	5										
	3	8	5	4										

**3,855**

c) Amir's method

	H	T	O
	7	0	0
-	3	4	8
	3	5	2

	H	T	O
	6	9	9
-	3	4	7
	3	5	2

Use Amir's method to work out  $6,000 - 2,145$

5	9	9	9
-	2	1	4
3	8	5	5

3,855

d) Whose method do you prefer, Rosie's or Amir's?

4 Use the column method to work out the subtractions.

a)  $500 - 341$

1	5	9
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c)  $£3,000 - £2,782$

£	2	1	8
---	---	---	---

b)  $1,000 - 729$

2	7	1
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d)  $10,000 \text{ mm} - 7,302 \text{ mm}$

2	6	9	8	mm
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5 A theme park has 3,002 light bulbs.  
1,785 of the light bulbs are blue.

How many bulbs are not blue?

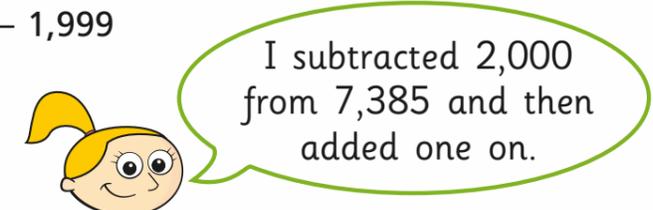
Use a method where you subtract 3 from each number.

1,217

6 Eva is working out  $7,385 - 1,999$

$7,385 - 2,000 = 5,385$

$7,385 - 1,999 = 5,386$



a) Explain why Eva's method works.

*She is subtracting 1 less than 2,000 so she subtracts 2,000 then adds 1 back on*

b) Explain a different method that Eva could have used.

The method should involve changing each number before subtracting.

*She could add 1 to each number so the difference doesn't change and calculate  $7,386 - 2,000$*

c) Work out the subtractions.

$4,512 - 2,999 = 1,513$

$5,147 - 997 = 4,150$

$3,704 - 2,998 = 706$