## Efficient subtraction

1) a) Use the column method to work out 603-595

|  | $\mathbf{H}$ | $\mathbf{T}$ | $\mathbf{O}$ |
| :--- | :--- | :--- | :--- |
|  | 6 | 0 | 3 |
| - | 5 | 9 | 5 |
|  |  |  |  |

1 a) Use the column method to work out 603-595

|  |  |  | 0 |
| :--- | :--- | :--- | :--- |
|  | $\mathbf{H}$ | $\mathbf{T}$ | $\mathbf{0}$ |
| - | 5 | 9 | 5 |
|  |  |  | 8 |

Did you get 8?
b) Count on the number line to work out 603-595

b) Count on the number line to work out 603-595=8

8 jumps


Which method do you prefer?
Which method is the most efficient? (needs the least work)
b) Count on the number line to work out 603-595=8

8 jumps


The number line is the most efficient for this calculation because the numbers are so close together.

3 b) Maisie is working out 800-237.
She has used this column subtraction to find the answer. Look closely. What do you notice?

|  |  |  |  |
| :--- | :--- | :--- | :--- |
|  | $\mathbf{H}$ | $\mathbf{T}$ | $\mathbf{O}$ |
|  | 7 | 9 | 9 |
| - | 2 | 3 | 7 |
|  | 5 | 6 | 2 |

Then, she added 1 to the make the answer 563. $562+1=563$

Can you see what she's done?

3 b) Maisie is working out 800-237
She has used 799 instead of 800 to make an easier subtraction with no exchanges.

|  | $\mathbf{H}$ | $\mathbf{T}$ | $\mathbf{O}$ |
| :--- | :--- | :--- | :--- |
|  | 7 | 9 | 9 |
| - | 2 | 3 | 7 |
|  | 5 | 6 | 2 |

Then, she added 1 to the answer because 800-799 = 1
$562+1=563$
So, $800-237=563$

3 b) Use Maisie's method to work out 900-253

3 b) 900-253.
Did you use 899 instead of 900 ?

|  | $\mathbf{H}$ | $\mathbf{T}$ | $\mathbf{O}$ |
| :--- | :--- | :--- | :--- |
|  | 8 | 9 | 9 |
| - | 2 | 5 | 3 |
|  | 6 | 4 | 6 |

Then, added 1 to the answer?
$646+1=647$

Did you get 647?

5 A party shop has 2,009 balloons.
1,675 of the balloons are pink.
How many balloons are NOT pink?


Use a method where you subtract 10 from each number.

What numbers would you start with?
5) A party shop has 2,009 balloons.

1,675 of the balloons are pink.
How many balloons are NOT pink?
Use a method where you subtract 10 from each number.

What numbers would you start with?

Start with 1999 and 1665. Write a column subtraction.
5) A party shop has 2,009 balloons.

1,675 of the balloons are pink.
How many balloons are NOT pink?
Use a method where you subtract 10 from each number.
$1999-1665=$ ?
Work out the column subtraction.

5) A party shop has 2,009 balloons.

1,675 of the balloons are pink.
How many balloons are NOT pink?
Use a method where you subtract 10 from each number.

Did you get 334 ?
What do we need to do now?

|  | Th | $\mathbf{H}$ | $\mathbf{T}$ | $\mathbf{O}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | 1 | 9 | 9 | 9 |
| - | 1 | 6 | 6 | 5 |
|  |  | 3 | 3 | 4 |

5 A party shop has 2,009 balloons.
1,675 of the balloons are pink.
How many balloons are NOT pink?
Use a method where you subtract 10 from each number.
Because we subtracted 10 from both Numbers, we don't need to do anything else!

So, 2,009-1675 = 334

|  | Th | $\mathbf{H}$ | $\mathbf{T}$ | $\mathbf{O}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | 1 | 9 | 9 | 9 |
| - | 1 | 6 | 6 | 5 |
|  |  | 3 | 3 | 4 |

