

## Subtraction methods

There are many ways numbers can be subtracted. The best method will depend on the problem.

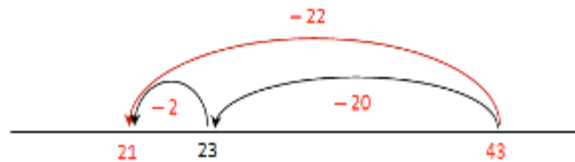
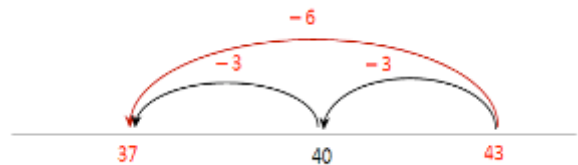
**Bridging:** this works well when subtracting a small number from another number.

Subtract to the nearest 10 and then subtract the remaining part. For example, subtracting from 43, take away 3 to get to 40 and then the remainder.

$$43 - 6 = 43 - 3 - 3 = 40 - 3 = \mathbf{37}$$

$$43 - 15 = 43 - 3 - 12 = 40 - 12 = 30 - 2 = \mathbf{28}$$

$$143 - 17 = 143 - 3 - 14 = 140 - 14 = 130 - 4 = \mathbf{126}$$



**Counting back:** this is good if you think visually.

Use a number line to count back. For  $43 - 22$ :

starting at 43, moving back 20 lands on 23 and then a further 2 leaves 21.

**Compensation:** this is effective when the number you're taking away is close to a 'round' number, usually a 10.

Subtract an approximate value and then adjust.

For  $125 - 38$ , use  $125 - 40$  and then add back 2 to give  $85 + 2 = \mathbf{87}$

For  $545 - 129$ , use  $545 - 130$  and add 1 giving the answer  $415 + 1 = \mathbf{416}$

**Partitioning:** this works for all problems (but it can get very long).

Break the numbers into units, tens, hundreds and so on.

$$445 - 212 = (400 - 200) + (40 - 10) + (5 - 2) = 200 + 30 + 3 = \mathbf{233}$$

**Formal methods:** this works for all (although it's easy to make errors).

Line up the units, tens etc in columns and subtract from right to left, remembering to use tens from the next column when needed (sometimes called 'borrowing'). See the 'Written methods' factsheet for more details.

$$\begin{array}{r} 61 \\ 276 \\ 107 \\ \hline 169 \end{array}$$

### Informal methods

As with addition (see the factsheet), there are a number of informal methods that can be used in combination with the methods above, including the use of physical objects (eg your fingers).