

Twisted subtractions

Subtract a number which is the reverse of another, e.g. $62 - 26$.

Skill practised:

- Subtracting pairs of two-digit numbers

Conjecture: There is something special about the answers to subtractions when you reverse one of the numbers.

What to do:

Children work individually or in pairs.

1. Think of a two-digit number, e.g. 75.
Write the digits in the opposite order to create a new number, e.g. 57.
2. Subtract the smaller number from the larger number, e.g. $75 - 57$.
3. Repeat with a new two-digit number.
4. Do you notice anything about the answers?
5. Try some other two-digit numbers and see if you can see anything special about all of the answers to these special subtractions.

What happens if you use numbers with consecutive digits, e.g. $43 - 34$ and $65 - 56$?

HINT: Add the digits together in each answer. What do you notice?

Aims:

- To subtract any pair of two-digit numbers
- To look for a general rule

Minimum number of calculations expected

10

Twisted subtractions

1. Think of a two-digit number.
Write the digits in the opposite order
to create a new number.
2. Subtract the smaller number from the
larger number.
3. Repeat with a new two-digit number.
4. Do you notice anything about the answers?
5. Try some other two-digit numbers
and see if you can see anything special
about all of the answers to these
special subtractions.

75
57
 $75 - 57 =$

3 15

57 60 75

$75 - 57 = 18$

What happens if you use numbers with consecutive digits, e.g. $43 - 34$ and $65 - 56$?