

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
 $75 - 57 =$
 $75 - 57 = 18$

Diagram illustrating the subtraction $75 - 57 = 18$ using a number line. The number line has points marked at 57, 60, and 75. A bracket above the line from 57 to 60 is labeled '3'. A bracket above the line from 60 to 75 is labeled '15'.

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