# Palindromic Numbers

5

Look at these car number plates. The number parts are all **Palindromes** — they read the same backwards as forwards.


Write down some palindromic numbers between 100 and 500.

## STEPS TO PALINDROME

- Start with a 2-digit number: example 63.
- Reverse the digits and add:

63 + 36 = **99** ← **This is a ONE step palindrome**

**If the sum is not a palindrome, keep reversing the digits and adding.**

- Now try 86

86 + 68 = 154

154 + 451 = 605

605 + 506 = **1111**

**This is a THREE step palindrome**

- Try other 2-digit numbers and see how many steps they take.
- How will you record your results?
- Do all 2-digit numbers become palindromes?
- Try some 3-digit numbers. Use a calculator.

EXTRA IDEAS

- Investigate palindromic **DATES**. Example 30/11/03
  How many can you find in the "noughties" decade?
- Investigate palindromic **TIMES**. Example 9:39
  you find?