

PALINDROMIC DECIMALS!

What is a palindrome?

37.73 is a palindromic decimal
but 5.65 and 988.9 are not.

Why not?

We can make 37.73 in an interesting way.

Start with a decimal number - 9.7

Reverse it - 7.9

Add these together - $9.7 + 7.9$

Keep reversing and adding until you get
a palindromic decimal!

$$\begin{array}{r} 9.7 \\ + 7.9 \\ \hline 17.6 \\ + 6.71 \\ \hline 24.31 \\ + 13.42 \\ \hline 37.73 \end{array}$$

Which U.t numbers does this work for?

How many steps does it take?

Can you identify and explain a pattern?