THIS IS WHAT I CALL...

DUAL INVERSAL NUMBERS

E.G.

2 & 5

1/2 = 0.5

1/5 = 0.2

OK … How about 4?

4 & 25

1/4 = 0.25

1/25 = 0.04

Pretty simple, eh? Watch out cos ‘ere they come – more of ‘em!

THE GREAT ...

27 & 37!

$1/27 = 0.\overline{037}$

$1/37 = 0.\overline{027}$

These lines mean recurring
so $0.\overline{037}$ = 0.037037037037...


THE GREAT ...
27 & 37!
1/27 = 0.037
1/37 = 0.027

WANT
MORE?

7 & 142857

$$1/7 = 0.\overline{142857}$$

$$1/142857 = 0.\overline{000007}$$

Oh yeah … I forgot (drum roll please)

3

3

$1/3 = 0.\overline{3}$

$1/3 = 0.\overline{3}$

3 is a ‘cannibal’ dual inversal.

Number	Pair
1	10
2	5
3	3
4	25
5	2
6	*
7	142857
8	125
9	11
10	1

Number	Pair
11	9
12	*
13	76923
14	714285
15	*
16	625
17	5882352941176 47
18	*
19	5263157894736842 1
20	50

*We'll come back to these later!

Here are a few interesting things:

*Interesting point no. 1 - It doesn't work for everything...

6

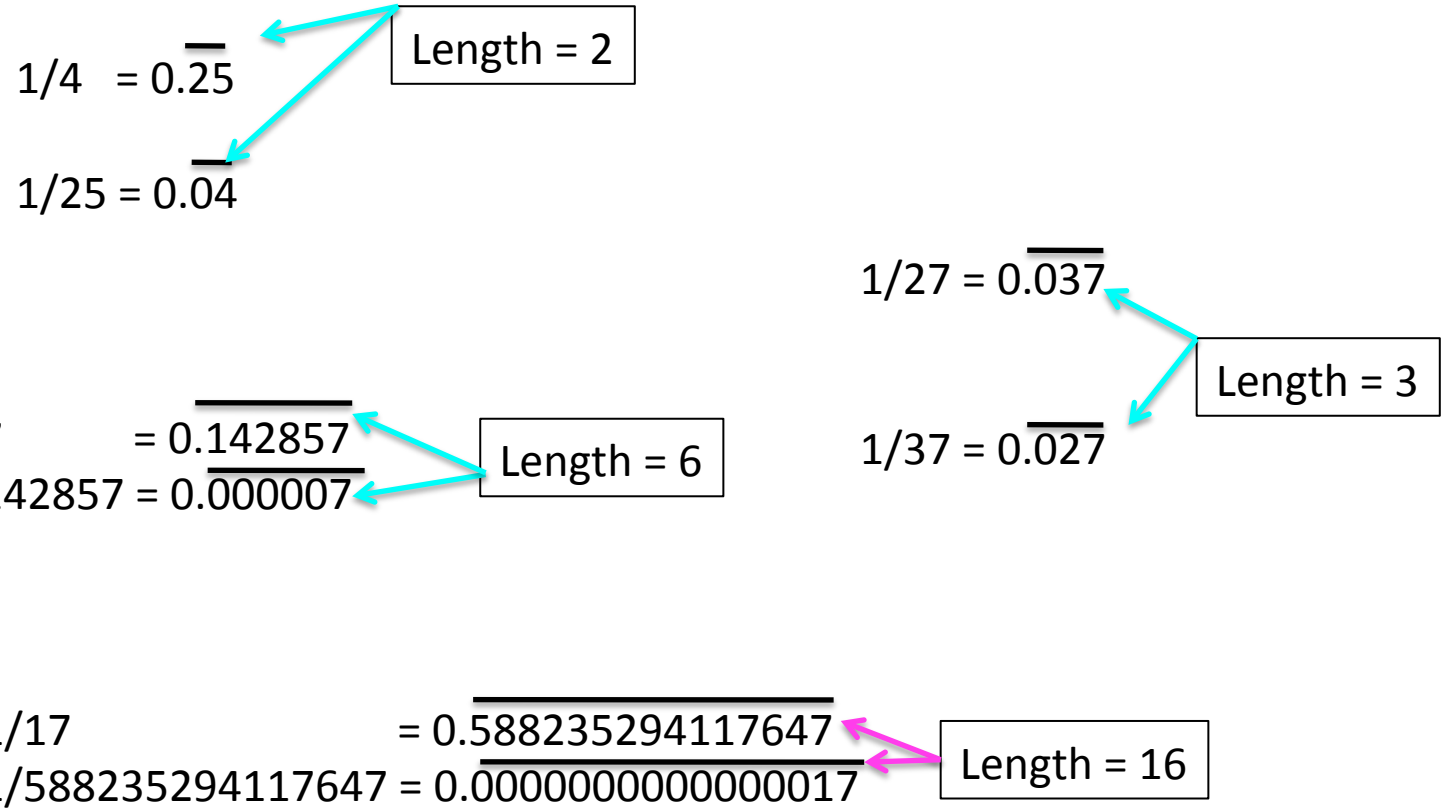
15

They are all multiples of 3 but it does work for some e.g. 21 & 47619

Interesting point no. 2

If A & B and C & D are dual inversal pairs then AC & BD and AD & BC are dual inversal pairs.

Interesting point no. 3 - length of the recurring sequence is always the same in a pair



Thanks for watching!