

Number Patterns

Numbers that end in

2
4
6
8
0

}

Can be divided by 2

Numbers that end in

0
5

}

Can be divided by 5

Numbers that have the same two numbers

11
22
33
44
55
66
77
88
99

}

Can be divided by 11

Numbers that add up to 9 can be divided by 9

09	(0 + 9 = 9)	72	(7 + 2 = 9)
18	(1 + 8 = 9)	81	(8 + 1 = 9)
27	(2 + 7 = 9)	90	(9 + 0 = 9)
36	(3 + 6 = 9)		
45	(4 + 5 = 9)		
54	(5 + 4 = 9)		
63	(6 + 3 = 9)		

Can a number be divided by 3?

Example: 36

Add the digits together: $3 + 6 = 9$

Can the sum (9) be divided by 3? Yes

So 36 can be divided by 3.

Can a number be divided by 6?

If the number can be divided by two (so the last digit ends in 0,2,4,6 or 8)

AND

If the number can be divided by 3 (add the digits up and see if the sum can be divided by 3)

THEN

That number can also be divided by 6.

Example: 36

The number ends in 6 so it can be divided by 2.

The digits $3 + 6 = 9$, 9 can be evenly divided by 3 so 36 can be divided by 3.

Since 36 can be divided by 2 and 3 it can also be divided by 6.