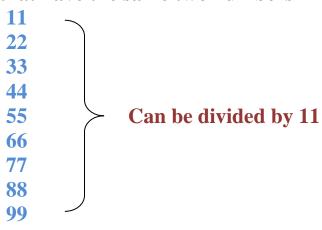
Number Patterns

Numbers that end in

```
2
4
6
8
0
Can be divided by 2
```

Numbers that end in

Numbers that have the same two numbers



Numbers that add up to 9 can be divided by 9

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

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.