

Tests of Divisibility

Is 4,267,386 exactly divisible by 6?

Is 1,754,320 exactly divisible by 8?

To find out, we could spend ages doing long division, but there is a much easier way – with these tests of divisibility!

Divisible by	Test	Example
2	Last digit is even	413 <u>6</u>
3	Sum of digits is divisible by 3	414 (4+1+4=9 which is divisible by 3)
4	Last 2 digits are divisible by 4	7 <u>12</u>
5	Last digit is 0 or 5	42 <u>5</u>
6	Last digit is even and whole number is divisible by 3	624 (4 is even and 6+2+4=12 which is divisible by 3)
9	Sum of digits is divisible by 9	18,144 (1+8+1+4+4=18)
10	Last digit is 0	43 <u>0</u>

Complete this table (you may write on the sheet)

Are these numbers exactly divisible by... ?

Number	2	3	4	5	6	9	10
215,640							
4,800,480							
7,216,541							
374,172							
9,991,888							
2,765,813							
89,765,342							

Using the tests of divisibility you have just discovered, circle the numbers that are **prime numbers**.

192

103

71

151

112

162