BLM 13

Rules of Divisibility

The **rules of divisibility** are rules or hints that help us to determine if a particular number will divide evenly into another number.

A number is divisible by:

2	if the last digit is divisible by 2 (even), e.g. 98.
3	if the sum of its digits is divisible by 3, e.g. in 1023 the digits 1 + 0 + 2 + 3 = 6, which is divisible by 3.
4	if the last 2 digits make a number divisible by 4, e.g. in 824, 24 is divisible by 4.
5	if the last digit is a 5 or a zero, e.g. 80, 900, 245.
6	if the number is divisible by 2 and 3, e.g. 24 ÷ 2 = 12 and 24 ÷ 3 = 8.
8	if the last 3 digits make a number divisible by 8, e.g. in 2616, 616 ÷ 8 = 77.
9	if the sum of the digits is divisible by 9, e.g. in 2430, 2 + 4 + 3 + 0 = 9, which is divisible by 9.
10	if the last digit is a zero, e.g. 1000, 18000.
11	if the sum of the even positioned digits and the sum of the odd positioned digits differ by 0 or 11, e.g. in 2596, 2 + 9 = 11 and 5 + 6 = 11, which gives a difference of zero.