

# Divisibility Rules

Divisor	Divisibility Condition	Example
2	The last digit is even (0, 2, 4, 6, or 8).	38 : 2 is even which is divisible by 2.
3	The sum of the digits is divisible by 3. For large numbers, digits may be summed iteratively.	4,053 => 4+0+5+3=12 and 1+2=3 which is clearly divisible by 3.
4	Add the ones digit to twice the tens digit. (All digits to the left of the tens digit can be ignored.)	7,372 : 2 + (2 x 7) = 16 which is clearly divisible by 4.
	The last two digits divisible by 4.	20,516 : 16 is divisible by 4.
	If the tens digit is even, and the ones digit is 0, 4, or 8. If the tens digit is odd, and the ones digit is 2, or 6.	728 : 2 is even, & the last digit is 8. 356 : 3 is odd, & the last digit is 6.
5	The last digit is 0 or 5.	1,285 : the last digit is 5.
6	If it is divisible by 2 and by 3.	2,562 : 2 + 5 + 6 + 2 = 15, which it is divisible by 3, and the last digit is even which is divisible by 2, so the number is divisible 6.
8	If the last three digits are divisible by 8, then the entire number is also divisible by 8.	1,024 : 024 is divisible by 8 so, 1,024 is also divisible by 8.
9	The sum of the digits is divisible by 9. For large numbers, digits may be summed iteratively.	1,269 => 1+2+6+9=18 and 1+8=9 which is clearly divisible by 9.