

Divisibility Rules

There are rules you can use to see if the numbers 2, 3, 4, 5, 6, 9, and 10 are factors of another number.

Factor	Rule	Example
2	If the last digit of a number is even, then the number is divisible by 2.	2,356,768 \longrightarrow ends in 8; therefore 2,356,768 is divisible by 2.
3	If the sum of the digits is divisible by 3, then the number is divisible by 3.	456 \longrightarrow $4 + 5 + 6 = 15$; 15 is divisible by 3; therefore 465 is divisible by 3.
4	If the last two digits are divisible by 4, then the number is divisible by 4.	2048 \longrightarrow 48 is divisible by 4; therefore 2048 is divisible by 4.
5	If the number ends in either 5 or 0, then it is divisible by 5.	4565 \longrightarrow ends in 5; therefore 4565 is divisible by 5.
6	If <i>both</i> rules for 2 and 3 apply, then the number is divisible by 6.	18 \longrightarrow ends in an even number <i>and</i> the digits add up to 9, which is divisible by 3; therefore, 18 is divisible by 6.
9	If the sum of the digits is divisible by 9, then the number is divisible by 9.	333 \longrightarrow $3 + 3 + 3 = 9$, which is divisible by 9; therefore, 333 is divisible by 9.
10	If the number ends in 0, it is divisible by 10.	4,567,670 \longrightarrow ends in 0; therefore 4,567,670 is divisible by 10.