Divisibility of Numbers

A number is **divisible** by another number if it divides evenly without remainder. For example, 18 is divisible by 3 because 18 ÷ 3 = 6 exactly.

2

A number is divisible by 2 if the ones digit is 0, 2, 4, 6, or 8. (A number that is divisible by 2 is an even number.)

Example: 234 is divisible by 2 because the ones digit is 4.

3

A number is divisible by 3 if the sum of its digits is a multiple of 3.

Example: 10 019 is *not* divisible by 3 because 1+0+0+1+9 = 11.
Example: 10 320 is divisible by 3 because 1+0+3+2+0 = 6.

4

A number is divisible by 4 if the last two digits form a number which is a multiple of 4.

Example: 10 314 is *not* divisible by 4 because 14 is not a multiple of 4.
Example: 20 232 is divisible by 4 because 32 is a multiple of 4.

5

A number is divisible by 5 if the ones digit is 0 or 5.

Example: 440 is divisible by 5 because the ones digit is 0.

6

A number is divisible by 6 if it is divisible by 2 and by 3.

Example: 57 416 is *not* divisible by 6 because 5+7+4+1+6 = 25, which is not a multiple of 3.
Example: 59 262 is divisible by 3 because 5+9+2+6+2 = 24, and the last digit is 2.

7

A number is divisible by 7 if, when you subtract twice the ones digit from the rest of the number, the result is divisible by 7. (Perform this test as often as necessary.)

Example: 1792 is divisible by 7: 2 × 2 = 4; 179 − 4 = 175. 5 × 2 = 10; 17 − 10 = 7.

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