DIVISIBILITY TEST FOR TWO

A number is divisible by two if it is an even number or if it ends with an even digit (0, 2, 4, 6, 8).

For example

24, 606, 2024, 15608, 61073486, 83834562, etc.

DIVISIBILITY TEST FOR THREE

A number is divisible by three if the sum of its digits is a multiple of three.
Multiples of three are (3, 6, 9, 12, 15, 18, 21, etc).

For example

21, 603, 2025, 11604, etc.

DIVISIBILITY TEST FOR FOUR

A number is divisible by four if a number formed by the last two digits is divisible by 4.

For example

24, 604, 2024, 15648, 61073400, 13834560, etc.

DIVISIBILITY TEST FOR FIVE

A number is divisible by five if its last digit is either 0 or 5.

For example

5, 1020, 10705, 2956100, etc.

DIVISIBILITY TEST FOR SIX

A number is divisible by six if it is even number and the sum of its digits is divisible by 3.

For example

24, 606, 2058, 15708, 61073472, 83834562, etc.

DIVISIBILITY TEST FOR SEVEN

The last digit is doubled and the result is subtracted from the number formed by the remaining digits.

The outcome should be divisible by 7 as shown below.

In the number 1792,

We double the last digit 2 to get (2 + 2) = 4

The remaining digits form 179

We now subtract 179 - 4 = 175

We again double the last digit 5 to get (5 + 5) = 10

The remaining digits form 17

We now subtract 17 – 10 = 7

The final outcome is divisible by 7.

Therefore, 1792 is divisible by 7.

DIVISIBILITY TEST FOR EIGHT

A number is divisible by 8 if the last three digits form a number divisible by 8.

For example

24, 112, 14208, 63168, 726600, 8383704, etc.

DIVISIBILITY TEST FOR NINE

A number is divisible by 9 if the sum of its digits is divisible by nine.

For example

27, 900, 60030, 9756043, 87235641 etc.

DIVISIBILITY TEST FOR TEN
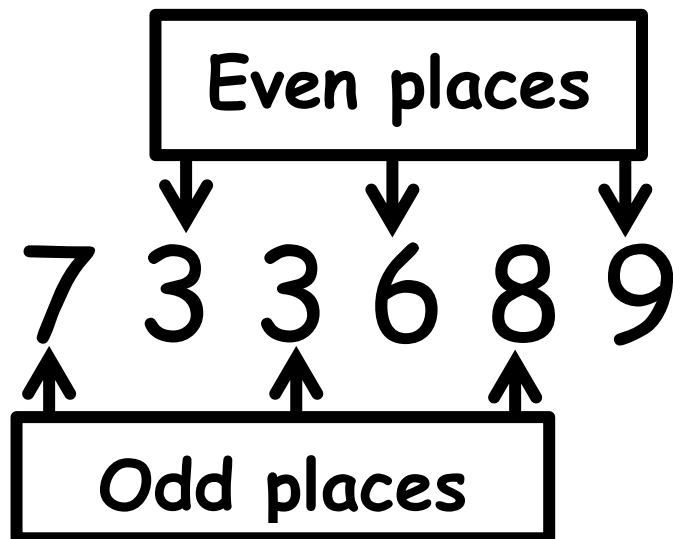
A number is divisible by 10 if it's last digit is 0.

For example

40, 6060, 20000, 15100, 61073480, 83800000, etc.

DIVISIBILITY TEST FOR ELEVEN

A number is divisible by 11 if the difference between the sum of its digits in even place and the sum of its digits in odd place is eleven or zero as shown below.

In the number 733689,

Sum of even $\longrightarrow$ 3+6+9 = 18

Sum of odd $\longrightarrow$ 7+3+8 = 18

Difference $\longrightarrow$ 18-18 = 0

Therefore, 733689 is divisible by 11

Even places

7 3 3 6 8 9

Odd places

DIVISIBILITY TEST FOR TWELVE

A number is divisible by 12 if it's divisible by both 3 and 4.

For example

24, 10548, 8196, 55068, etc.