Divisibility rules:

Given below are some basic rules of divisibility of some common numbers

1. Number ending with 0,2,4,6,8 is **divisible by 2**

2.If last two digit of a number is divisible 4 or the last 2 digits of a number having more than 2 digits, are zeroes the **number is divisible by 4**

3 If last three digit of a number is divisible by 8 or the last 3 digits of a number having more than 3 digits, are zeroes the **number is divisible by 8**.

Hence a general rule for numbers is that a number is divisible by 2^n if the last n digits are divisible by 2^n.

4. Same rule applies for 5.Hence a general rule for numbers is that a number is divisible by 5^n if the last n digits are divisible by 5^n.

6. If Sum of the digits of a number is divisible by 3/9 the **number is divisible by 3/9.**

7. **For divisibility rule of 7** we make group of three digits starting from right towards left. Then we take the sum of all the numbers of odd placed groups and even placed groups separately. Then we take the difference of sum of odd placed groups and sum of even placed groups. if the difference is divisible by 7 the entire number is divisible by 7. Example: 346527659 if (346+659)-(527) is divisible by 7 the number 346527659 is divisible by 7. **Divisibility rule of 7 and 13 is same**.

8. For **divisibility rule of 11** take the sum of all odd placed digits and sum of all the even placed digits separately. Then take their difference. If the difference is divisible by 11 the entire number is divisible by 11. Example: for number 36542783748 if((3+5+2+8+7+8) –(6+4+7+3+4)) is divisible by 11 the above number is divisible by 11.