

Divisibility Rules of Numbers

→ Rule of 2: If last digit of a number is 0 or even then the number is divisible of 2. Ex-10, 16, 106, 2000 etc

→ Rule of 3: If the sum of digits of a number is divisible by 3 then the number is divisible of 3.

$$\text{Ex: } 753 \rightarrow 7+5+3 = 15 \div 3 = 5$$

→ Rule of 4: If last 2 digits of a number are 0s or last 2 digits are divisible by 4 then the number will be divisible of 4. Ex: 100, 144

$$\begin{array}{r} 260 \\ \underline{} \\ \end{array} \rightarrow \div 4 = 15$$

→ Rule of 5: If last digit of a number is 0 or 5 then the number is divisible of 5. Ex- 355, 450

→ Rule of 6: If a number is divisible by both 2 and 3 then the number is divisible of 6. Ex-12, 30

→ Rule of 7: If the last digit of a number is multiplied with 2 then subtracted by it's remaining and can be divided by 7 then the number is divisible of 7.

$$\text{Ex: } 175 \quad \underline{} \rightarrow \times 2 = 10$$

$$\therefore 17 - 10 = 7 \div 7 = 1$$

→ Rule of 8: If last 3 digits of a number are 0s or last 3 digits is divisible by 8 then the number is divisible of 8. Ex-1000, 888

→ Rule of 9: If some of digits of a number is divisible by 9 then the number is divisible of 9.

$$\text{Ex: } 990 \rightarrow 9+9+0 = 18 \div 2 = 9$$

$$450 \rightarrow 4+5+0 = 9 \div 9 = 1$$

→ Rule of 10: If last digit of a number is 0 then the number is divisible of 10. Ex-50, 100, 5000

→ Rule of 11: If the difference of the sum of odd place and sum of even place is 0 or multiples of 11 then the number is divisible of 11.

$$\text{Ex- } \begin{array}{r} 93907 \\ \underline{12345} \end{array}$$

$$(9+9+7) - (3+0) = 22 \div 11 = 2$$