

## Tests of Divisibility- Simple tricks

 ${\bf Canonical\ name} \quad {\bf TestsOfDivisibilitySimpleTricks}$ 

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With this simple short cuts you can find out a number is divisible by a given number Divisible by 2: A number is divisible by 2, if its units digit is any of 0, 2, 4, 6, 8. Example: 6798512

Divisible by 3: A number is divisible by 3, if sum of its digits divisible by 3. Example:  $123456\ 1+2+3+4+5+6=21\ 21$  is divisible by 3 so 123456 is also divisible by 3

Divisible by 4: if the last two digits of a given are divisible 4, so the number can be divisible by 4. Example: 749232 Last two digits are 32 which are divisible by 4 so the given number is also divisible by 4

Divisible by 5: If units digit of a number is either 0 or 5 it is divisible 5. Example: 749230

Divisible by 6: If a given number is divisible by 2 and 3 (which are factors of 6), then the number is divisible by 6. Example: 35256 Units digit is 6 so divisible by 23+5+2+5+6=21 so divisible by 3 So 35256 divisible by 6

Divisible by 8: if last 3 digits of a given number is divisible 8, then the given number is divisible 8. Example:  $953360\ 360$  is divisible by 8, so 953360 is divisible by 8

Divisible by 9: A number is divisible by 9, if sum of its digits divisible by 9. Example:  $50832\ 5+0+8+3+2=18$  divisible by 9 so 50832 divisible by 9 Divisible by 10: A number is divisible 10, if it ends with 0. Example: 508320

Divisible by 11: A number is divisible by 11, if the difference of sum of its digits at odd places and sum of its digits at even places, is either 0 or a number divisible by 11. Example: 4832718 (sum of digits at odd places) (sum of digits at even places) =(8+7+3+4)-(1+2+8) = 11 which is divisible by 11. So 4832718 is divisible by 11.

I hope this simple tricks, will be very helpful to solve maths homework problems easily.