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How to find whether a given number is prime  
or not?

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What is a prime number

A number is greater than 1 is called a prime number, if it has only two factors, namely 1 and the number itself.

Prime numbers up to 100 are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97

Procedure to find out the prime number

Suppose A is given number.

Step 1: Find a whole number nearly greater than the square root of A.  $K \geq \text{square root}(A)$  Step 2: Test whether A is divisible by any prime number less than K. If yes A is not a prime number. If not, A is prime number.

Example:

Find out whether 337 is a prime number or not?

Step 1:  $19 \geq \text{square root}(337)$  Prime numbers less than 19 are 2, 3, 5, 7, 11, 13, 17 Step 2: 337 is not divisible by any of them

Therefore 337 is a prime number

These are simple and easy tricks which are helpful to solve your math homework problems .