FACTORS AND MULTIPLES

Friday, 6th May, 2016

Objectives

- What are factors and multiples
- Find the factors and multiples of numbers

Introduction

When you multiply two numbers together the answer you get is called the product or multiple of both numbers. The numbers you multiplied together are the factors of the answer you got. For instance, 6 times 3 equals 18. This goes to say that 18 is the multiple or product of 6 and 3 while 6 and 3 are factors of 18.

Factors and Multiples

Factors are numbers that can divide another number without remainder. For example, 3 divides 12 into 4 without remainder, therefore 3 is a factor of 12.

Multiples are numbers that can be divided by another number without remainder. For example, 12 can be divided by 4 without remainder, therefore 12 is a multiple of 4.

How to Find the Factors of a Number

If you are given a number to find its factors, follow the steps below:

- Divide the number increasingly from 1. Any number that divides the number without remainder is a factor of the given number.
- As soon as you divide up to half the number the remaining factor is the number itself.

How to Find the Multiples of a Number

If you are given a number and you are expected to find its multiples, just multiply the given number increasingly starting from 1. All the results you get are the multiples of the given number.

Examples

1. Find the factors of 48

Solving

48 ÷ 1 = 48; 48 ÷ 2 = 24; 48 ÷ 3 = 16; 48 ÷ 4 = 12; 48 ÷ 6 = 8.

∴ All the factors of 48 are: 1, 2, 3, 4, 6, 8, 12, 16, 24 and 48.

2. Write out the first five multiples of 7

Solving

7 x 1 = 7;
7 x 2 =14;
7 x 3 = 21;
7 x 4 =28;
7 x 5 = 35.

∴ The first five multiples of 7 are 7, 14, 21, 28, and 35.