Factors and Multiples
By **BrushMyQuant**

YouTube Video Link to this Post is [Here](#)

Following is covered in the video

> ¤ **What are Multiples?**
> ¤ **What are Factors?**
> ¤ **How to find the number whose two factors are given.**
> ¤ **Relationship between divisor, factor and multiple**

What are Multiples?

We say that "a" is a multiple of "b" when we can express "a" as a product of "b" and any integer

a = kb , where k is an integer

Example 1: 6 is a multiple of 2 because we can express 6 as a product of 2 and an integer (3). (6 = 2*3)

Example 2: "a number(n) is a multiple of 3".
=> n = 3*k (where k is an integer)

What are Factors?

We say that a number "a" is a factor of a number "b" when we can write "b" as a multiple of "a"

b = ka , where k is an integer

Example 1: 2 is a factor of 6 because we can write 6 as a multiple of 2 i.e. 6 = 2*3

Example 2: "a number(n) has 3 as one of its factor's".
So, n is a multiple of 3.
=> n = 3*k (where k is an integer)

How to find the number whose two factors are given.

If a number has 2 and 3 as its factors then the number will be a multiple of LCM of these two factors

n = LCM (2,3) k = 6k

Relationship between divisor, factor and multiple

If n is divisible by 3 then

- **¤ 3 is a factor of n**
- **¤ n is a multiple of 3**
- **¤ n can be written as, n = 3k, where k is an integer**

Hope it helps!
Good Luck!