



Highest common factor and lowest common multiple

A **factor** of a given number is a whole number that divides into it without remainder.

The **highest common factor (HCF)** of 2 numbers is the largest number that will divide exactly into each of them.

The **factors** of **12** are **1, 2, 3, 4, 6** and **12**.

The **factors** of **18** are **1, 2, 3, 6, 9** and **18**.

The **common factors** of **12** and **18** are **1, 2, 3** and **6**.

The **HCF** of **12** and **18** is **6**.

A **multiple** of a given number is obtained by multiplying that number by a whole number.

The **lowest common multiple (LCM)** of 2 or more numbers is the smallest number that is a multiple of each of them.

The **multiples** of **6** are **6, 12, 18, 24, 30** and so on.

The **multiples** of **4** are **4, 8, 12, 16, 20, 24, 28, 32** and so on.

The **common multiples** of **6** and **4** are **12, 24** and so on.

The **LCM** of **6** and **4** is **12**.