

Lowest Common Multiple and Highest Common Factor

Lowest Common Multiple (LCM)

The lowest common multiple of two integers is the smallest number that both numbers can divide into with there being no remainder.

For example the lowest common multiple of 16 and 24 is 48.

The definition can be extended to more than two integers.

For example the LCM of 16, 24 and 30 is 240.

Highest Common Factor (HCF)

The highest common factor of two numbers is the largest integer that divides into both numbers without a remainder.

For example the highest common factor of 16 and 24 is 8.

The definition can be extended to more than two integers.

For example the HCF of 16, 24 and 30 is 2.

Spreadsheet

The accompanying [spreadsheet](#) computes the LCM and HCF of two numbers.

| Lowest Common Multiple (LCM) and Highest Common Factor (HCF) | | | | | | |
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| | number 1 | number 2 | | LCM | | HCF |
| | 16 | 24 | | 48 | | 8 |
| | | | | | | |

Definition

If two numbers have a highest common factor of 1 then the numbers are said to be *relatively prime*.