

Factors, Common Factors, Highest Common Factor

Factors

Factors of a number are all the numbers that divide into it exactly

Example

Factors of 24 are:

1, 2, 3, 4, 6, 8, 12, 24

$$1 \times 24 = 24$$

$$2 \times 12 = 24$$

$$3 \times 8 = 24$$

$$4 \times 6 = 24$$

$$6 \times 4 = 24$$

$$8 \times 3 = 24$$

$$12 \times 2 = 24$$

$$24 \times 1 = 24$$



Common Factors

Factors that appear in factor lists for two or more numbers

Factors of:

10: 1, 2, 5, 10

24: 1, 2, 3, 4, 6, 8, 12, 24

Common factors for 10 & 24 are 1 and 2

Highest Common Factor (HCF)

The largest number that will divide into both/all the numbers selected

Factors of 10 are 1, 2, 5, 10

Factors of 24 are: 1, 2, 3, 4, 6, 8, 12, 24

Common factors for 10 & 24 are 1 and 2 and the highest is 2