0.1 Faktorisering

If an integer dividend and an integer divisor resulters in an integer quotient, we say that the dividend is *divisible* by the divisor. For expample is 6 divisible with 3 because $6 : 3 = 2$, and 40 is divsible with 10 because $40 : 10 = 4$. Divisibility contributes to the definition of *prime numbers*:

0.1 Primtal

A natural number which is larger than 1, og and only divisible by itself and 1, is a prime number.

Eksempel

The five first prime numbers are $2, 3, 5, 7$ og 11.

0.2 Factorization

Factorization involves writing a number as the product of other numbers.

Eksempel

Faktorize 24 in three different ways.

Svar:

$$24 = 2 \cdot 12$$

$$24 = 3 \cdot 8$$

$$24 = 2 \cdot 3 \cdot 4$$

0.3 Primtalsfaktorisering

Faktorization involving prime factors only is called prime faktorization.

Eksempel

Prime factorize 12.

Svar:

$$12 = 2 \cdot 2 \cdot 3$$