Scientific Notation

Scientific Notation Format

Value Expressed in Decimal Notation (only one nonzero digit left of the decimal) $\longrightarrow a \times 10^{b}$ ← Integer

Example:

$$3.58 \times 10^{4} = 35{,}800.$$

Positive Exponent

If the exponent is positive, the decimal moves to the right based on the value of the exponent.

Example:

$$1.5 \times 10^{2} \longrightarrow 1.50. \longrightarrow 150.$$

10 to the power of 2

2 movements right (1 2)

Negative Exponent

If the exponent is negative, the decimal moves to the left based on the value of the exponent.

Example:

$$1.5 \times 10^{-2} \longrightarrow 0.01.5 \longrightarrow 0.015$$

10 to the power of -2

2 movements left (2 1)