

Scientific Notation

- Shorthand method of handling large and small numbers
- Numbers are expressed by expressing decimal places as powers of ten
- Basic form

$$N \times 10^{\text{exp}}$$

$$1 \leq N < 10$$

Standard Notation to Scientific Notation Rules

1. Place one digit to the left of the decimal point.
2. Count the number of times you move the decimal. This is your exponent.
 - Moved left – exponent is positive
 - Moved right – exponent is negative
3. Round the number to 2 places after the decimal.

Examples

156.183

0.0004576

4.58

Scientific Notation to Standard Notation Rules

1. Move the decimal the number of times as in the exponent.
 - If exponent is positive move to the right
 - If exponent is negative move to the left

Examples

9.00×10^6

8.01×10^{-2}