

Scientific Notation Worksheet

Definitions

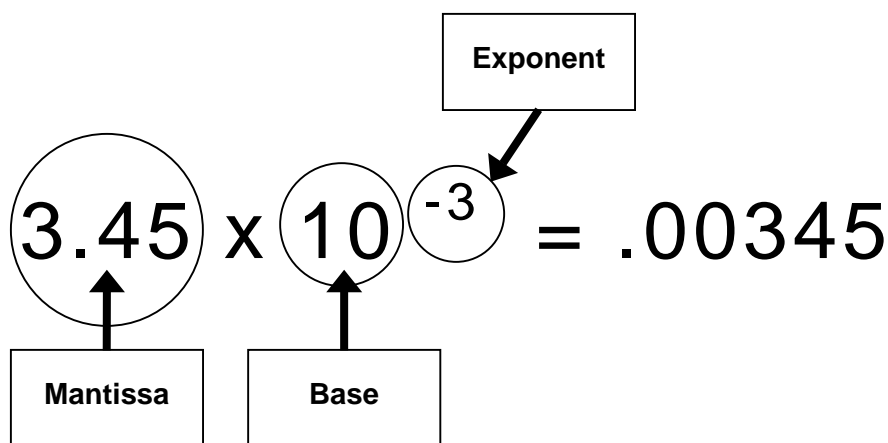
Scientific Notation a method used to convert really large or really small numbers into a manageable format for computation.

Three parts of a number are expressed in scientific notation:

Mantissa: a number between 1 and 9.9999... that approximates the magnitude of a number

Base: a multiplier – in this case, 10 – which, when applied to the mantissa, represents the movement of the decimal

Exponent: a number used to indicate the number of places and the direction in which a decimal is moved in the conversion of a number to scientific notation. If the exponent is negative, the decimal is moved to the left and the magnitude of the number is less than 1. If the exponent is positive, the decimal is moved to the right and the magnitude of the number is greater than 1. If the exponent is zero, the mantissa is the same as the number expressed in scientific notation.



List two real life contexts for the use of scientific notation:

Real life context #1 _____

Real life context #2 _____

Write these numbers in scientific notation:

Real life context #1 _____

Real life context #2 _____

Go to NYU Scientific notation tutorial site at www.nyu.edu/pages/mathmol/textbook/scinot.html.

How does this definition compare to that on the NYU scientific notation tutorial site?

Similarities

Differences
