Module 11 Simplifying Algebraic Expressions
with Polynomials
Lesson 2 Using Scientific Notation

Set 1

1. The distance from New York to Los Angeles is about 1.77×10^8 inches. Write this number in standard form.

177,000,000 inches

2. The mass of a snowflake is 3×10^{-6} kilograms. Convert this number to standard form.

0.000003 kilograms

3. The temperature in the core of the sun is 27,000,000 degrees Fahrenheit. Write this number in scientific notation.

2.7×10^7 degrees Fahrenheit

4. The length of an adult fruit fly is 0.004 of a meter. Write this length in scientific notation.

4×10^{-3} meters

Set 2

1. A computer signal travels at a rate of 2.6×10^{10} centimeters per second. How far does the signal travel in 6×10^{-9} seconds?

The signal travels 1.56×10^2 or 1.56 centimeters.

2. An atomic clock loses one second every 2×10^7 years. How much time will the clock lose in 100 years?

The clock will lose 5×10^{-6} seconds in 100 years.

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