

1 Relative Change

Now let's practice describing the relative change of measurements. Choose new variations of the problem with the "New Variation" button.


Our measurement changed from

117 m to 78 m .

The measurement changed by times.

The measurement by percent.

[← Check Work](#) [New Variation](#)






1. Before moving on, get at least 3 correct in a row, and write down an explanation for how to compute the relative change of a measurement as if you were explaining it to someone new.

2 Scientific Notation

First, let's practice using **scientific notation** to express very large or very small numbers in a user-friendly way.

$6,753,950 = \square \times \square$
[← Check Work](#) [New Variation](#)

$0.000758 = \square \times \square$
[← Check Work](#) [New Variation](#)





1. Before moving on, get at least 3 correct in a row, and write down an explanation for how to write very large or very small numbers using scientific notation as if you were explaining it to someone new.

3 Orders of Magnitude

As a group, make order of magnitude estimates for the following measurements. Identify the order of magnitude for each of your measurements.

1. The number of students enrolled at CSU Fort Collins.
2. The mass of an average human in kilograms. (Note $1 \text{ lb} \approx 0.5 \text{ kg}$)
3. The distance from Fort Collins to Denver in meters. (Note $1 \text{ mile} \approx 1,600 \text{ m}$)
4. The number of people on a commercial flight in the U.S. right now. (Note the U.S. population $\approx 3 \times 10^8$)