Let’s say I asked you to measure the length of your pinky with a ruler, and you got a measurement of 6.54 centimeters. There has to be an uncertainty associated with this measurement, but what would that uncertainty be?

In order to find an uncertainty, multiple measurements must be made. With multiple measurements, the uncertainty arises from the deviation of these measurements.

Now, let’s say I gave you a box, and I tasked you to measure the volume of the box and the uncertainty of that measurement. The sides of the box are measured to be 5.

There are several methods of propagating errors; the method we will be using in class is the Crank Three Times method. You may have heard of significant figures as a way of propagating and representing error. There are a few issues with this method: