

## Week 5 Assessment:

1. Which four views are included in the “Four View Layout” in Onshape?

*Front, Top, Right, Isometric.*

2. What is the difference between a Dimension and a tolerance?

*The dimension is the nominal (“perfect”) measurement of our geometry, whereas the tolerance is the acceptable variation of our geometry allowed during manufacturing.*

3. Name & Describe the following Dimension/Tolerance types:

$0.380^{+0.000}_{-0.005}$

- a. *Deviation - This communicates the allowable +/- deviation from the nominal dimension.*

$0.385$   
 $0.375$

- b. *Limits - This communicates the allowable limits of the dimension (the nominal is not shown).*

$0.380$

- c. *Basic - This has no tolerance, and therefore may only be used when GD&T is utilized to define the tolerance range.*

4. What is the real-world implication of changing a standard dimension on an engineering print from “1.750” to “1.75”?

*It means that we are changing the tolerance to a “looser” one (wider allowable range) as defined by the tolerance block in the drawing format.*

5. Do Onshape drawing views update automatically? Why or why not?

*No they do not, as this gives the designer control whether they want the drawing to reflect the latest design or not. It is a form of revision control, since Onshape does not have (or need) a formal PDM system.*