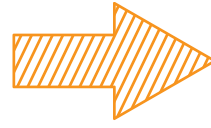




Getting Started with Tinkercad



Reverse Engineering

Step 1:

Create new design

Step 2:

Name your new design (top left), type over the existing name then press enter to save. From this point, the file will auto save and always be accessible through the cloud by logging into your account.

Step 3:

Edit Grid in the bottom right near the tools. Click **Edit Grid**, then change units to inches. **Press Update Grid** to save changes.

Step 4:

Change snap to grid to off. It is located just below the update grid. If you don't see **off**, it is in the top of the selection tree. Chromebooks and small screen computers may make this difficult to see.

Step 5:

Click the orange cylinder on the right side in your shapes. Drag the cylinder to the workplane. Click the bottom right sizing handle to change the size of the bolt shaft. Match the size to your sample bolt that you measured with your ruler.

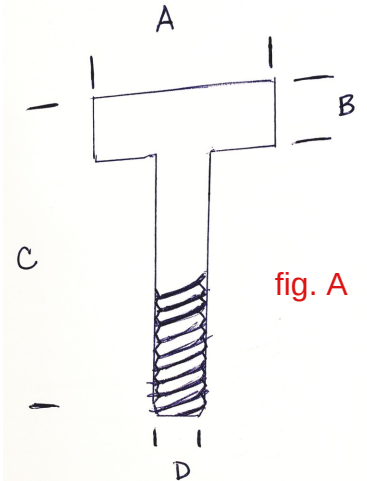


fig. A

Step 6:

Select a shape to create the top of your bolt. This could be the polygon, half sphere or flattened cylinder found in the basic tools.

HINT:

Change the view by clicking the right side of your mouse (mac or PC), clicking the house icon in the top right of your screen, or the 3D box just below the trash can icon in the top right of the screen.

Step 7:

Change basic shapes to featured shapes. Select the ISO metric thread tool to generate the threads. Count the rungs and measure the height. Select all the objects and group to see the finished product.

Step 8:

Now you are ready to PRINT!

Follow additional instructions to print four quarters that will make a one dollar visual aid to explain fractions, decimals and measurement in quarters.

