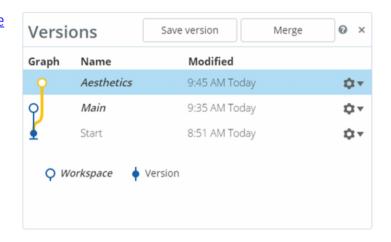
#### Goals:

- 1. Learn how to create a branched version of a document.
- 2. Practice making different modifications to each version.
- 3. Learn how versions merge together.



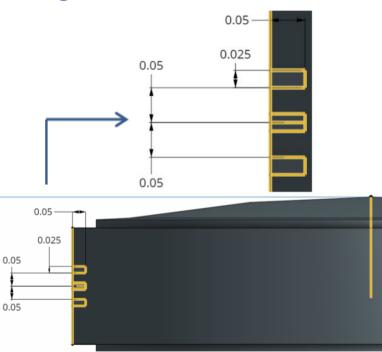
#### Instructions:

- 1. Open the Onshape document "Onshape Instructor Kit 5.2.1 Collaborative Editing".
- 2. Create a branch off of the initial version "Start" and name it "Aesthetics".
- 3. Make sure "Aesthetics" is the active version.
- 4. Switch over to the "Headphone" part studio.



### Instructions:(continued)

- 5. Roll back in the Features list before Sketch 3.
- 6. Suppress all of the features that created the circular indentations around the edge of the headphone.
- 7. Create the sketch shown in the image to the right on the Front plane. All of the squares are equal in size, and the middle square is coincident with the midpoint of the vertical line on the left.



### Instructions:(continued)

8. Cut away material using this sketch for a Revolve feature.



#### Instructions:(continued)

9. Create the sketch shown in the image to the right on the Top plane.

(Hint: Using a circumscribed polygon will help speed up the sketching process.)



### Instructions:(continued)

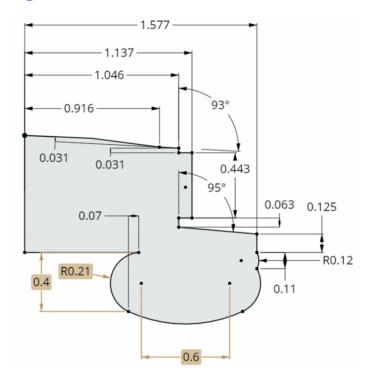
- 10. Select the correct sketch faces to remove material away from the headphone. The extrusion has a depth of 0.1 inches.
- 11. Roll the bar to the end of the features list.



#### Instructions:(continued)

- 12. Switch over to the "Main" version of the document.
- 13. Bring up the "Headphone" part studio.
- 14. Edit the sketch for the initial revolve feature and make the dimension changes shown in the image to the right.

(Hint: Dimensions may need to be modified in a particular order so that the geometry does not conflict with itself.)



### Instructions:(continued)

15. View the branches for the document. With the "Main" version still selected, merge the version "Aesthetics" into the current version.



#### Assessment:

- 1. Select the part in the features list.
- 2. Click on the <u>III</u> icon in the lower right corner of the Onshape interface.

What is the volume of the part  $(in^3)$ ?

