**EXERCISE 5 - EDIT AND REGENERATE**

**Goal**

The goal of this exercise is to become familiar with editing and regenerating part models.

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**Task 1:** Edit dimension values.

- Open the part called '4455-001.prt'
- In the model tree, select the feature called Extrude 1
- Click Edit in the RMB popup menu
- Double click the 4 dimension
- Enter < 5 > for the new value
- Double click the 21.5 dimension
- Enter < 21.7 > for the new value
- Click Exit Edit Dimension in the RMB popup menu
- Move the cursor away from the model then click the left mouse button
- Notice the part is automatically regenerated
- Read the message in the message area
- Save the part
- Click File, Close or click the icon

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**Task 2:** Edit dimension values and regenerate the model.

- Open the part called '4455-002.prt'
- Double click the part here
- Double click the 28.8 dimension
• Enter < 30 > for the new value
• Double click the 2.54 dimension
• Enter < 5 > for the new value
• Click **Exit Edit Dimension** in the RMB popup menu
• Move the cursor away from the model then click the left mouse button
• Notice the part is automatically regenerated
• Read the message in the message area
• **Save** the part
• The part is shown here
• Click **File, Close** or click the icon

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**Task 3:** Edit dimension values and regenerate the model.

• **Open** the part called '4455-205.prt'
• In the model tree, select the feature called **Sketch 1**
• Press and hold the 'Ctrl' key and select **Sketch 2** and **Sketch 3**
• Click **Edit** in the RMB popup menu
• Notice the dimensions of all three features are displayed
• Double click the 42.5 dimension and enter < 50 >
• Double click the 20 dimension and enter < 25 >
• Double click the 30 dimension and enter < 35 >
• Click **Exit Edit Dimension** in the RMB popup menu
• Move the cursor away from the model then click the left mouse button
• Notice the part is automatically regenerated
• Read the message in the message area
• **Save** the part
• Click **File, Close** or click the icon
Task 4: Edit dimension values and regenerate the model.

- Click the Open icon
- Double click the 'basic' folder
- Double click the 'labs' folder
- Double click the part called '4455-303.prt'
- Toggle off the Auto Regenerate option as shown below

![Image of software interface]

- In the model tree, select the Protrusion (near the top of the tree)
- Click Edit in the RMB popup menu
- Double click the .500 dimension
- Enter < 1.425 > for the new value
- Click the Regenerate icon
- Notice how long it takes to regenerate the model
• Read the message in the message area
• In the model tree, select the Chamfer (at the bottom of the tree)
• Click Edit in the RMB popup menu
• Double click the .065 dimension
• Enter <.080 > for the new value
• Click the Regenerate icon
• Notice how much less time it takes to regenerate the model, do you know why?
• Save the part
• Click File, Close or click the icon

Task 5: Use dynamic editing.

• Click the Open icon
• Double click the 'basic' folder
• Double click the 'labs' folder
• Double click the part called '4455-304.prt'
• Toggle on the Auto Regenerate option as shown below

Toggle on the Auto Regenerate option here
- Select the feature called **Extrude 1** then click **Edit** in the RMB popup menu
- Drag the handle up as shown below, notice the system snaps the dimension in increments of 0.125, and notice the other features dynamically update as the handle is moved

![Drag the handle up](image)

- After dragging the handle to a new location, release the mouse button then click the left mouse button again to complete the edit and automatically regenerate the model
- Select the feature called **Round 1** then click **Edit** in the RMB popup menu
- Drag the handle as shown below, notice the system snaps the dimension in increments of 0.125, and notice the other features dynamically update as the handle is moved

![Drag the handle to the left](image)

- After dragging the handle to a new location, release the mouse button then click the left mouse button again to complete the edit and automatically regenerate the model
- Select the feature called **Draft 1** then click **Edit** in the RMB popup menu
• Drag the handle as shown below, notice the system snaps the dimension in increments of 1 degree, and notice the other features dynamically update as the handle is moved.

Drag the handle to the left

• Notice what happens if you drag the handle too far.

• After dragging the handle to an appropriate new location, release the mouse button then click the left mouse button again to complete the edit and automatically regenerate the model.

• Select the feature called POINTS then click Edit in the RMB popup menu.

• Drag the handles to new locations, notice the holes move with the points, do you know why?

Drag the handles to new locations

• After dragging the handle to an appropriate new location, release the mouse button then click the left mouse button again to complete the edit and automatically regenerate the model.

• Save the part.

• Click File, Close or click the icon.