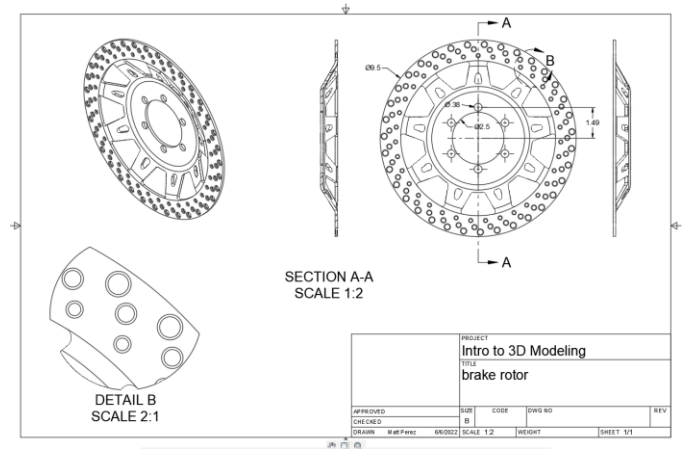# Create a technical drawing

In this module, you'll create a detailed drawing with several types of views.

Learning objectives:

- Create a 2D drawing.
- Apply drawing dimensions.
- Create drawing views.

The completed exercise

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1. Continue with the *brake rotor.f3d* file from the previous module.

Figure 1. Continue with the file from the previous module

2. Click the Toolbar's Change Workspace and choose the Drawing> from Design option from the menu.
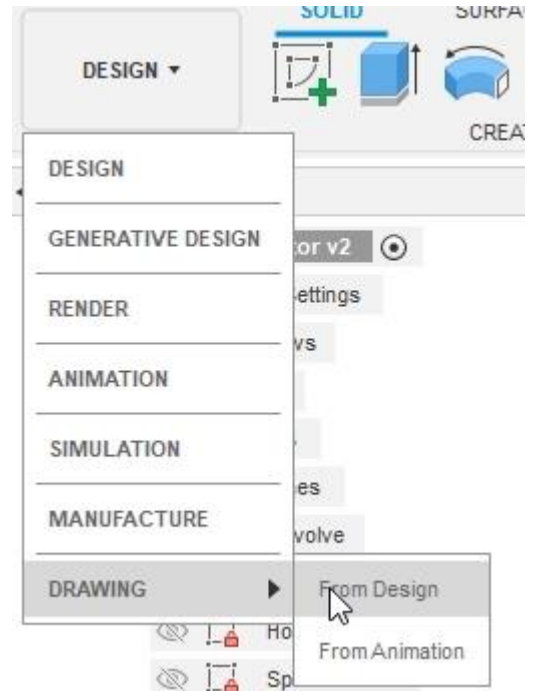

Figure 2. Change the workspace

3. Explore the various options available in the Create Drawing dialog, then OK the dialog without making any changes.
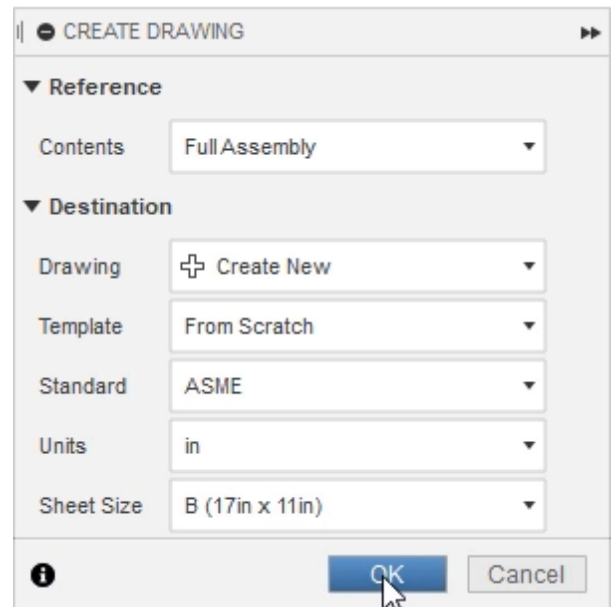

Figure 3. Create the new drawing

4. Before placing the model onto the drawing sheet, configure the appearance options in the Drawing View dialog.
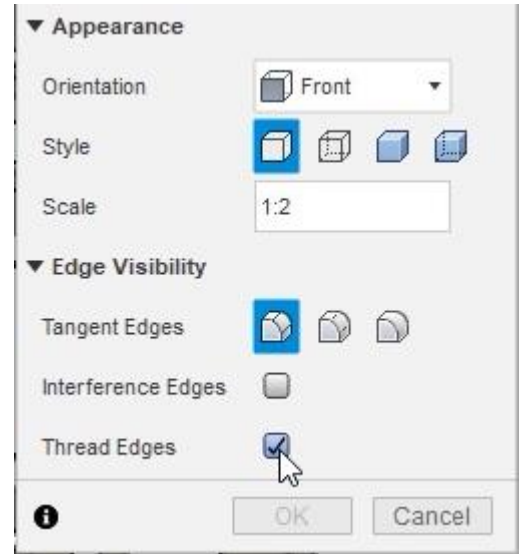

Figure 4. Configure the appearance options

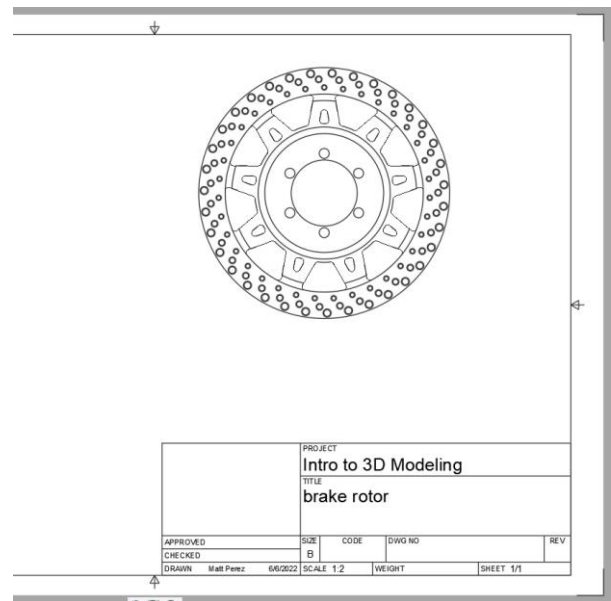5. Place the drawing view in the sheet's top right corner, then OK the dialog.

Figure 5. Place the drawing view

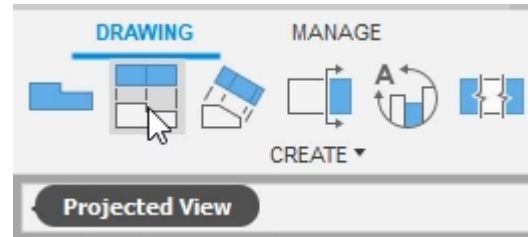**6.** Click Create> Projected View.

Figure 6. Open the Projected View tool

7. Select the image you placed on the sheet, then drag the cursor to the right to project a side view beside the base view. Click the green checkmark to end the Projected View tool.
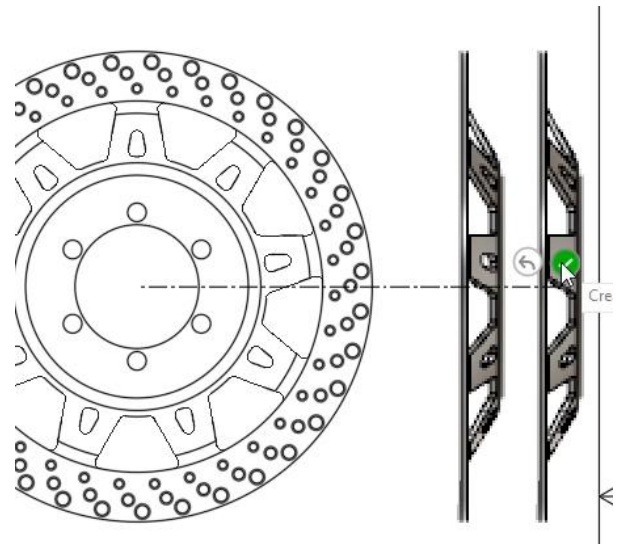

Figure 7. Project a view from the base view

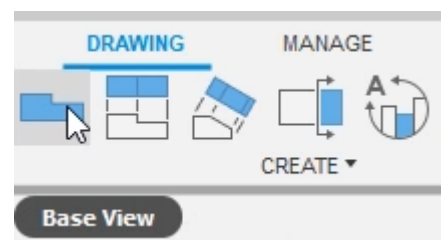**8.** Click Create> Base View.

Figure 8. Create a new base view

9. Use the options in the Drawing View dialog to configure the new base view's visual properties.
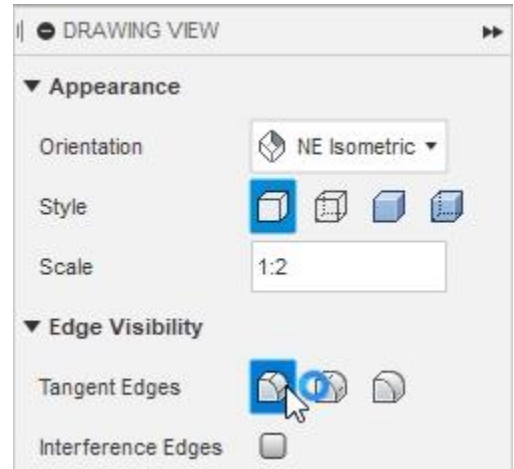

Figure 9. Configure the new base view's properties

10. Click in the sheet's top left corner to place the new base view, then OK the dialog.
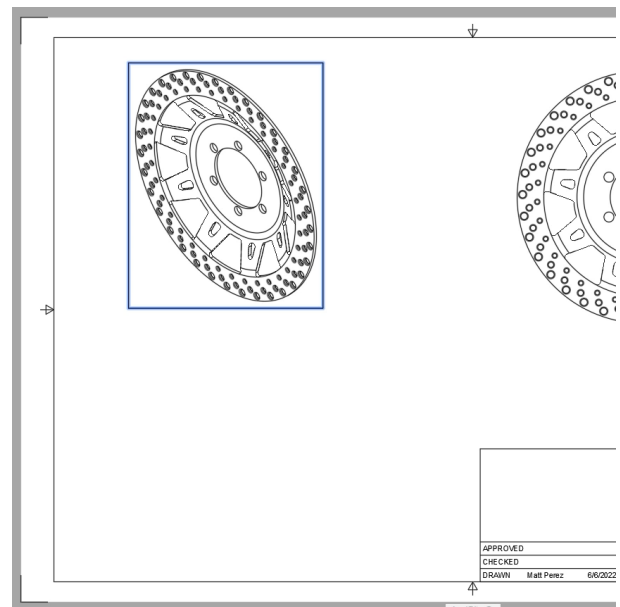

Figure 10. Place the new base view
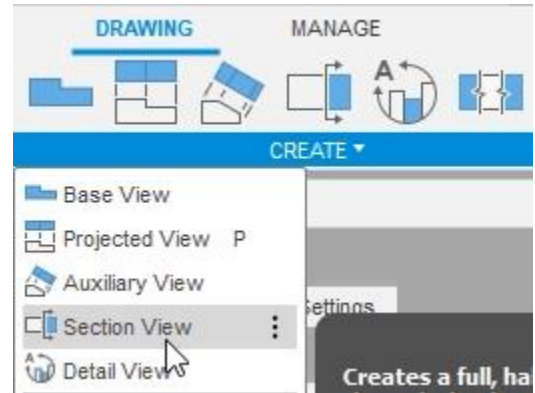
11. Click Create> Section View.

Figure 11. Open the Section View tool

12. Select the original base view as the view you want to section, then click above and below the view to create a section line going through the center of the brake rotor. Click the green checkmark to end the section view.
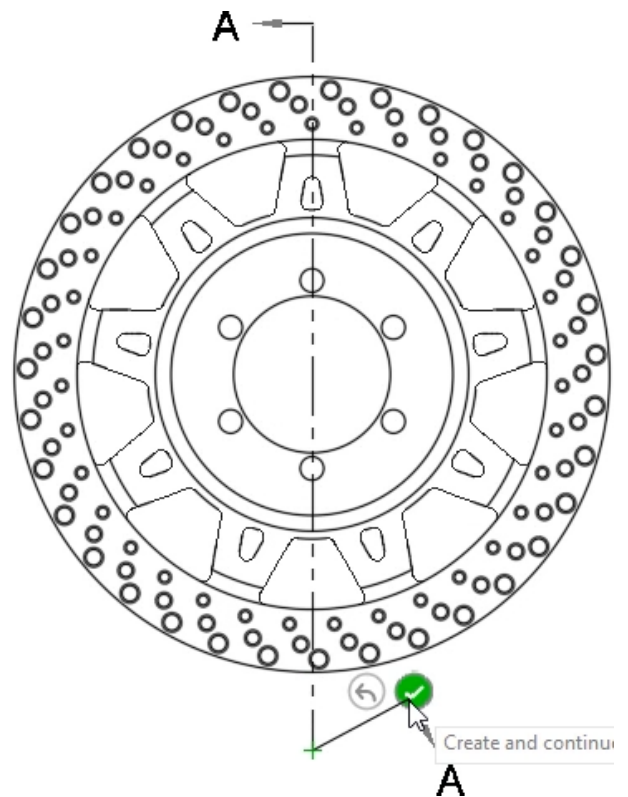

Figure 12. Create a section view

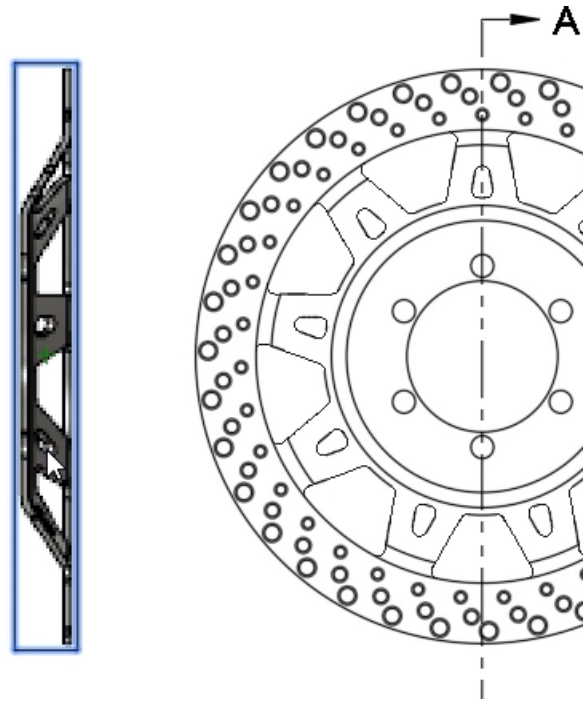**13.** Drag the section view beside the base view and click to place it onto the drawing sheet. OK the dialog.

Figure 13. Place the section view

14. Click Create> Detail View.

Figure 14. Open the Detail View tool

15. The detail view's size will be determined by the size of the circle you draw. Select the base view, then click to place the circle's center. Click again to determine the circle's diameter.

Figure 15. Draw a circle

16. Click to place the detail view in an open area of the sheet.
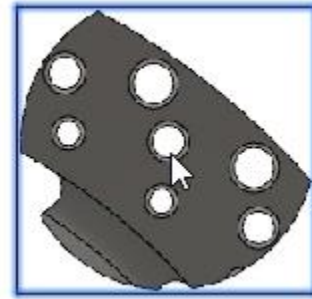

Figure 16. Place the detail view

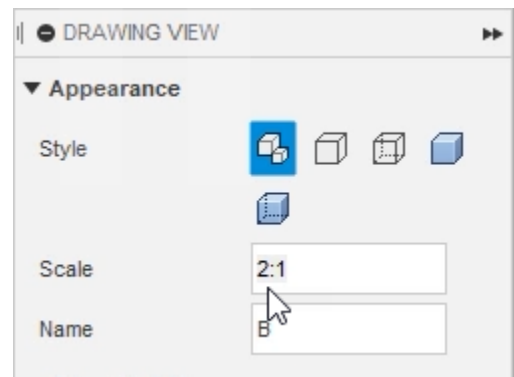**17.** Configure the detail view's appearance options, then OK the dialog.

Figure 17. Configure the appearance options
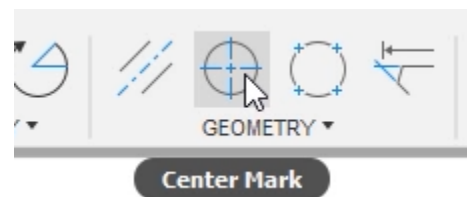
18. Click Geometry> Center Mark.

Figure 18. Open the Center Mark tool

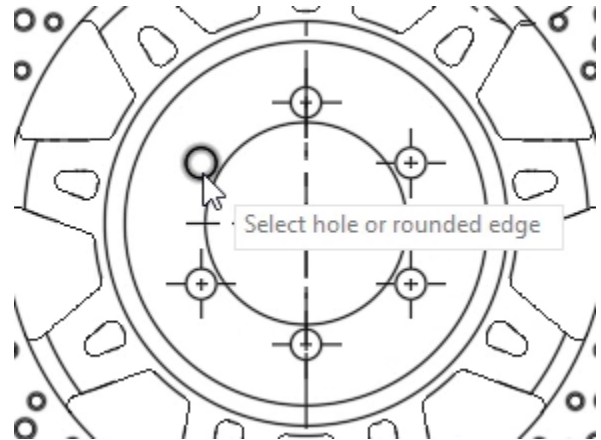**19.** Choose a circular edge to add a center mark.

Figure 19. Choose a circular edge to add a center mark
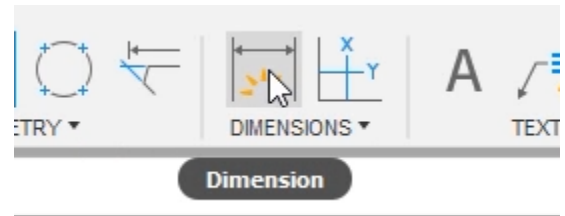
20. Click Dimensions> Dimension.

Figure 20. Open the Dimension tool

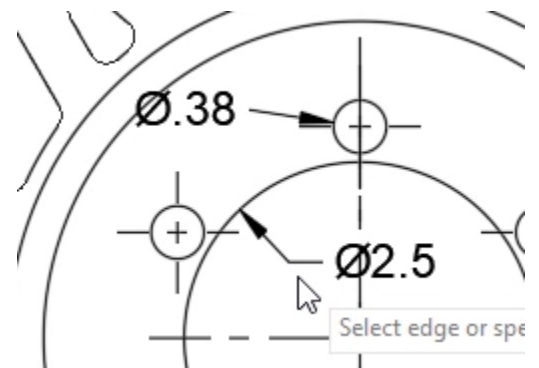**21.** Click various edges on the drawing views to apply dimensions to the features.

Figure 21. Dimension the drawing views

22. Save the file and notice that the word "Drawing" is automatically added to the original file's name. Click the Save dialog's Save, then continue to the next module.

Save

Name:

brake rotor Drawing

Figure 22. Save the file