

# Tutorial: Creo Drawing a Centerline

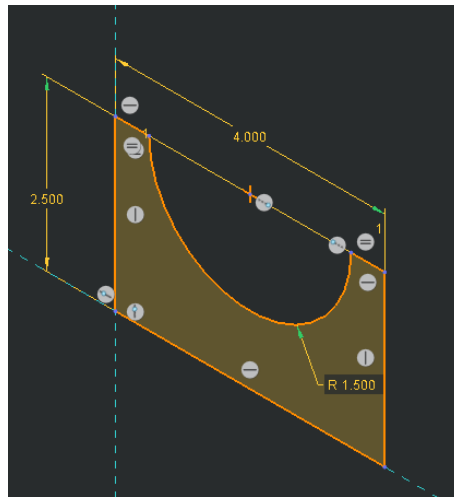
By Matthew Jourden

Brighton High School

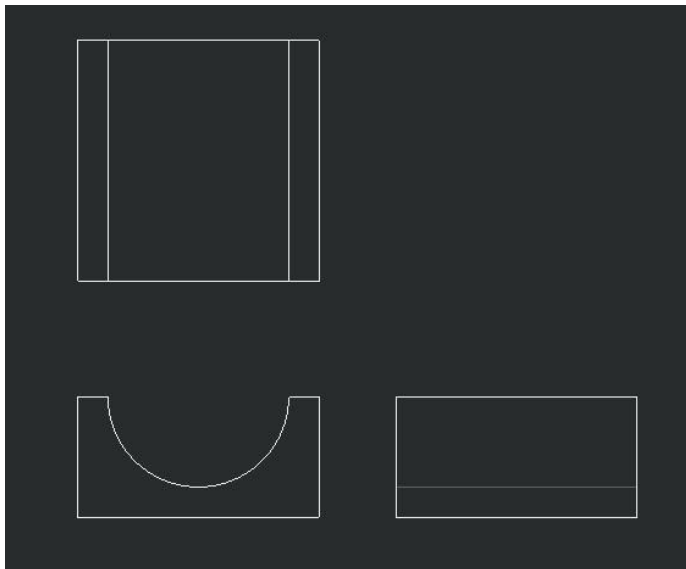
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Creo will not provide a centerline for curved features that are less than 360 degrees within the orthographic layout. If your feature is less than 360 degrees then designer will need to manually draw in a centerline. NOTE: Fillets and Rounds

i.e. Solid Model Sketch Shown with the feature created as an arc

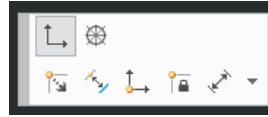


1. Place your views



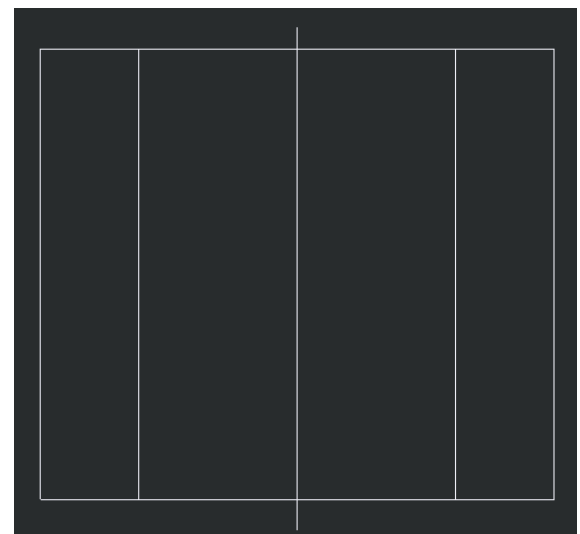
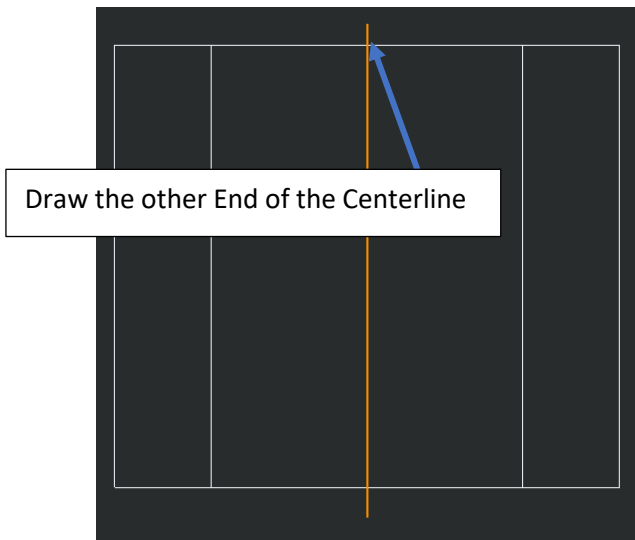
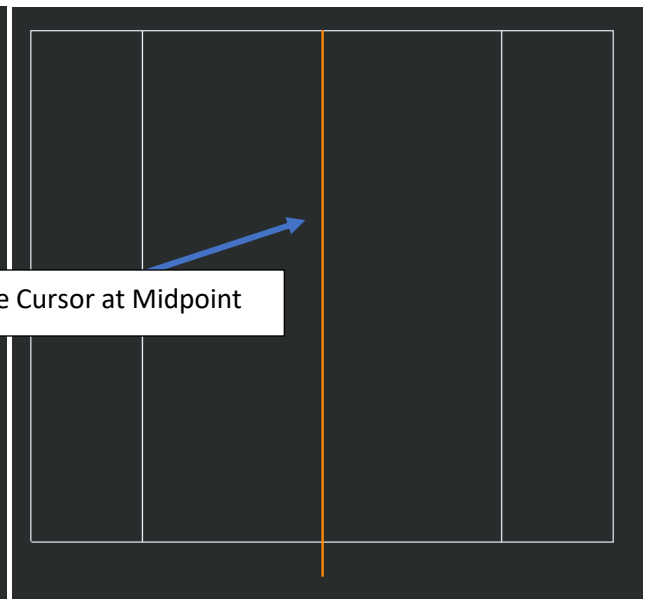
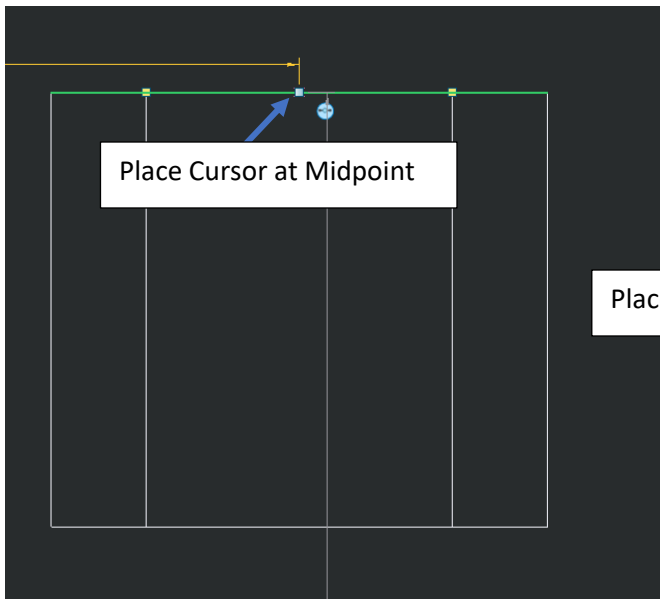
# Setting a Centerline the Arc View

- 2. Drawing Centerline: Select Sketch Tab > Select the line tool  
Snapping References Box will Appear. Box allows the user to change between selection types



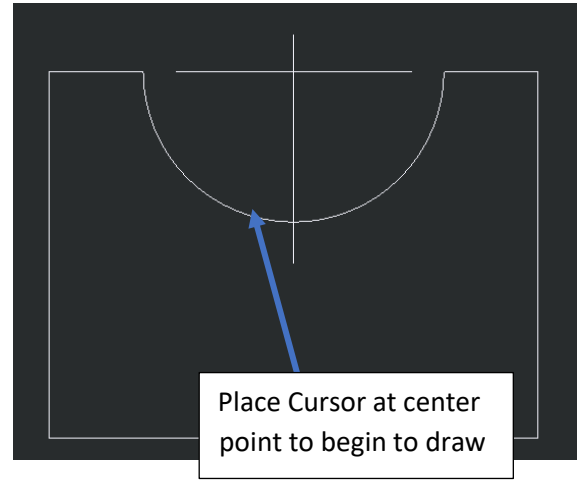
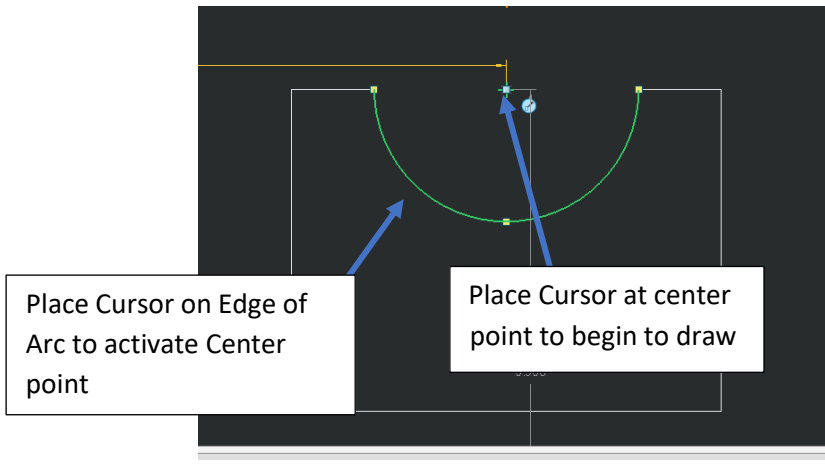
## a. Drawing Centerline in Profile View

Keep the Default Option Selected (Define Geometry based on Cartesian Units) > Place Cursor in location to draw Centerline, for this example Mid-Point of the Arc (NOTE: Creo will apply constraints to placed geometry (i.e. Mid-Point, Equal Length, Horizontal, Vertical, etc.) > Draw the Centerline (Be sure to extend beyond the end of the feature) > Creo will make this a Poly Line: Middle Mouse Button to stop drawing with the line tool > Place the other extended end of the centerline from the starting point > Finished Lines will appear as object lines; the step 3 will turn these into centerline font and proper color line weight



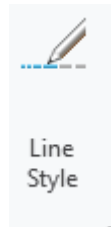
Lines will appear as object lines

- b. Drawing Centerline for an Arc: Select Line Tool > Place the Cursor on the Edge of the Arc to activate connection with the Center Point > Draw the Following Lines (Notice the vertical centerline above the center point of the arc is not as long as the bottom vertical line because there is not an arc located here; and the horizontal DO NOT extend to the side of the arc) > Finished Lines will appear as object lines; the next step will turn these into centerline font and proper color line weight



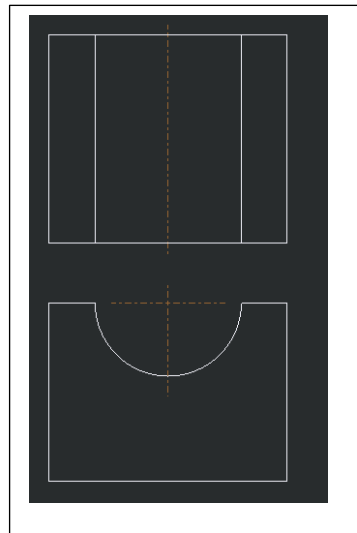
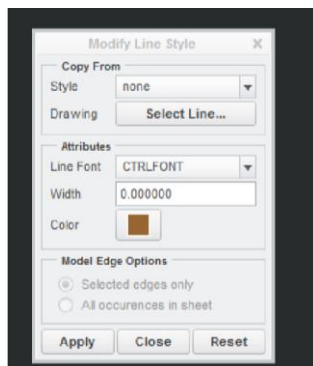
### 3. Changing Line Type

- a Select the Lines > Select Line Style Tool Icon (NOTE: Icon Appears in the following Tabs: Layout, Table, Annotate, and Sketch)



- b Change the following

- i Line Font- CTRLFONT
- ii Color- Datum
- iii iv. Click Apply
- iv Click Close

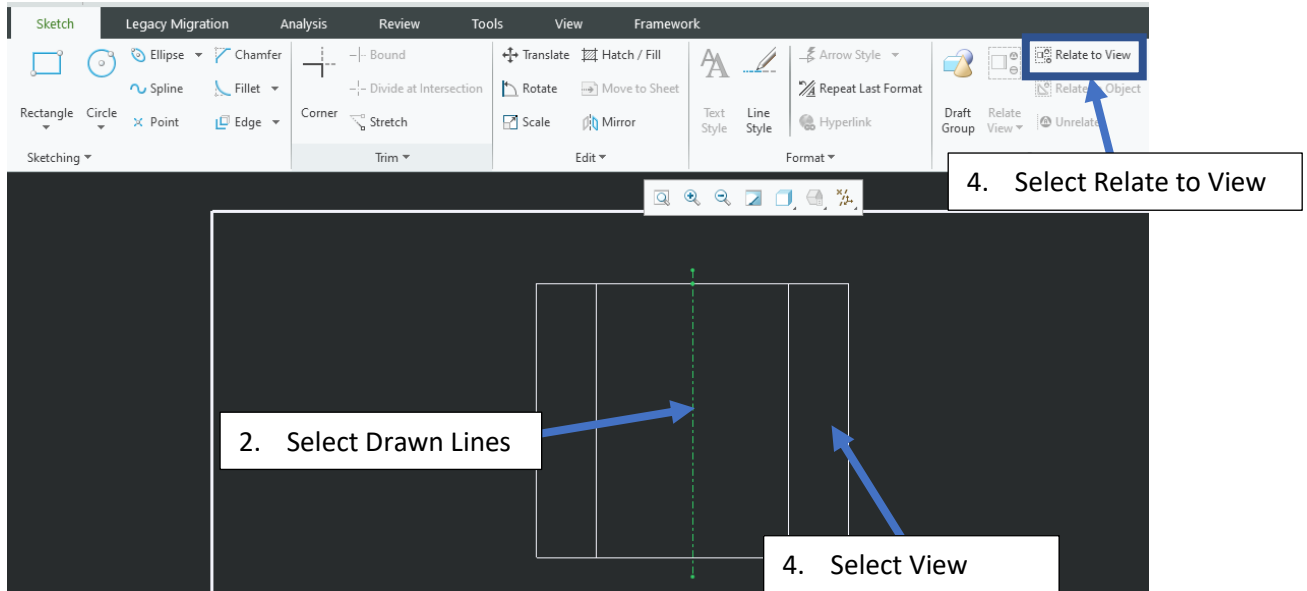


#### 4. Making Centerlines Part of the View

NOTE: by default the lines are not part of the view and are referenced at Full Scale. The issue becomes when the view is moved the Centerline or drawn feature will move with it.

a. Select Drawn Lines from one View (i.e. select lines in the Top View) (NOTE: To select the sketched lines user must be in the Sketch Tab >

a. Option 1: Select Relate to View Icon > Select Top View



b. Option 2: Right Mouse Button > Select Relate to View > Select View

