



How to Do Page 536 #C4 Using *The Geometer's Sketchpad*®

1. Create a circle.

- Click on the circle tool .
- Click at the desired location for the circle's centre.
- Move the cursor until the circle has the desired size and then click.

2. Create points along the circle every 45 degrees.

- Click on the selection tool .
- Select the point at the centre of the circle (It should be the only object highlighted. If it is not, click on the blank screen and then click on the centre again.)
- Click on Transform and choose Mark Center.
- Select the point on the circle. (It should be the only object highlighted.)
- Click on Transform and choose Rotate.
- Enter **45** for the number of degrees, as shown in Figure 1. (Note: The transformed point (45°) should now be highlighted.)
- Click on Transform and rotate the highlighted point 45° .
- Continue rotating the most recently transformed point until eight points are on the circle.

(Note: If you want a point to be at 0° , click on one of the points on the circle and drag it to the 0° position.)

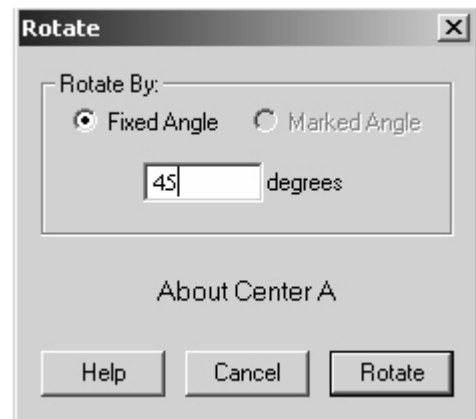


Figure 1

3. Construct quadrilaterals.

- Either clockwise or counterclockwise, select the four vertices of the quadrilateral you wish to construct.
- Click on Construct and choose Segments. You will see Figure 2.

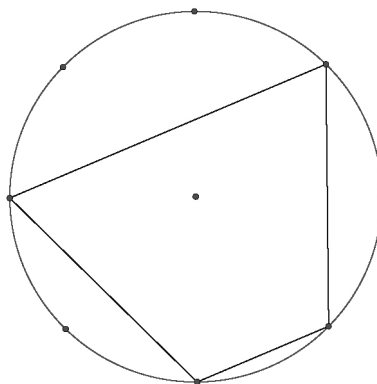


Figure 2

(Note: To remove a quadrilateral, select the four segments and then press delete. If you wish to compare the lengths of two segments, select the segments and click on Measure. Choose Length.)

