



Activity 3: Constructions with Desmos

1. Construct a line segment that is 3 units long.
 - Use toolbar to apply grid view for accurate measurement
 - Select “Segment” tool
 - Click a location on the grid to mark an endpoint
 - Click a location on the grid to mark a second endpoint
 - Use tool to remove grid view
2. Construct two circles using the line segment
 - Select “Circle” tool
 - Click on the left endpoint of the segment
 - Click on the right endpoint of the segment (Circle 1 Complete)
 - Click on the right endpoint of the segment
 - Click on the left endpoint of the segment (Circle 2 Complete)

What is the relationship between the two circles? Justify your answer.

3. Construct a triangle using the line segment (radius) and an intersection point between the circles
 - Select “Segment” tool
 - Click on the left endpoint of the segment, then click on the intersection of the circle above the line segment
 - Click on the right endpoint of the segment, then click on the intersection of the circle above the line segment

What type of triangle has been created? Justify your answer.

4. Construct a “mystery figure” using the original line segment (radius) and the opposite point of intersection between the circles.
 - Select “Segment” tool
 - Click on the left endpoint of the segment, then click on the intersection of the circle below the line segment (radius)
 - Click on the right endpoint of the segment, then click on the intersection of the circle below the line segment (radius)

What “mystery figure” has been created? Justify your answer.

In preparation for your next construction, please delete all line segments that were created in Steps 3 and 4.

5. Construct a line segment using the intersection points of the two circles.
 - Select “Segment” tool
 - Click on the first point of intersection between the two circles
 - Click on the second point of intersection between the two circles

What is the relationship between the two line segments? Justify your answer.