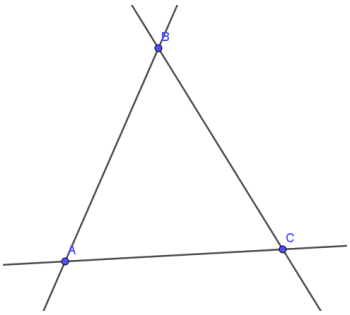
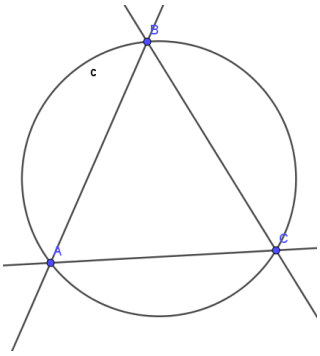
Wallace-Simson Line Geogebra Construction

1) Create 3 unique points in space using the Point tool.

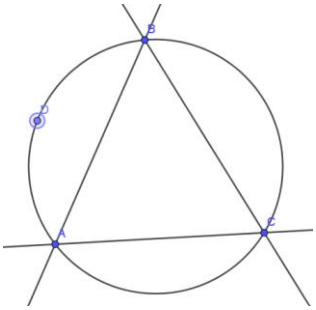
2) Create 3 lines using the Line tool (not segments or rays) going through the points to create a triangle.



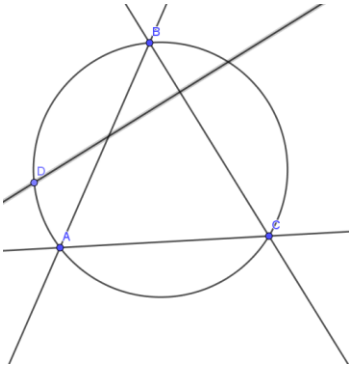
3) Create a circle uding the Circle→Circle Through 3 Points tool with the points ABC.



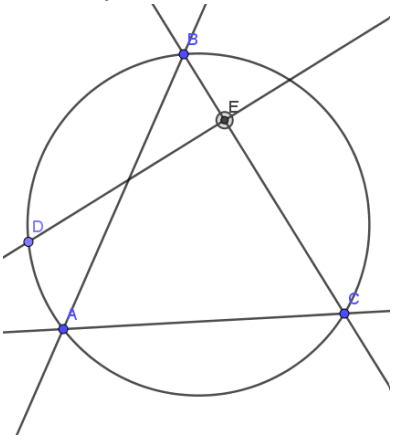
4) Create a 4th point, D, using the Point→On Object tool anywhwere on the circle's perimeter.



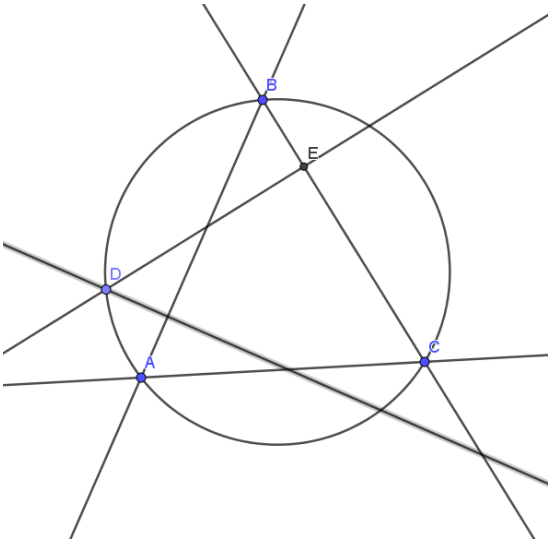
5) Create a line using the Perpendicular Line tool that goes through point D that is perpendicular to BC.



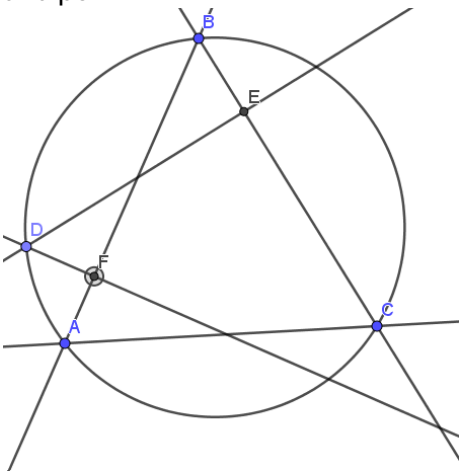
6) Create a point, E, using the Point→Intersection tool representing the intersection of the line going through BC and point D.



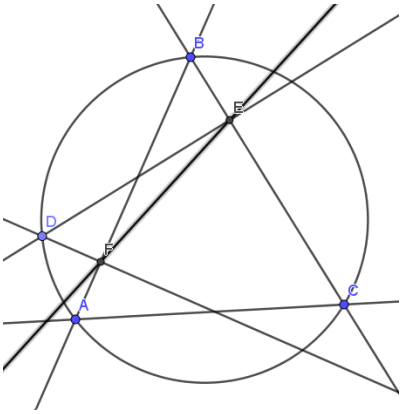
7) Create another perpendicular line going through point D and intersecting with line AB.



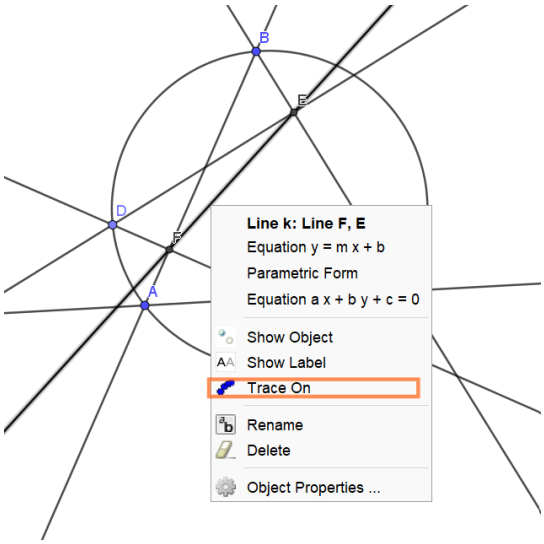
8) Create point F using the Point→Intersection tool representing the intersection of the line going through AB and point D.



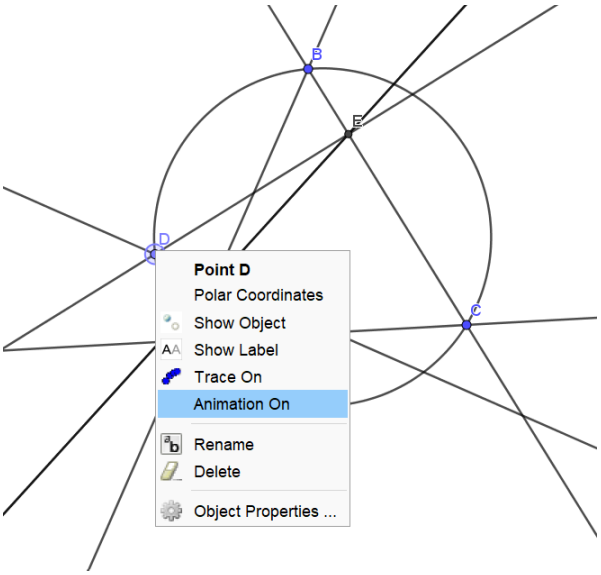
9) Create a line that goes through points E and F.



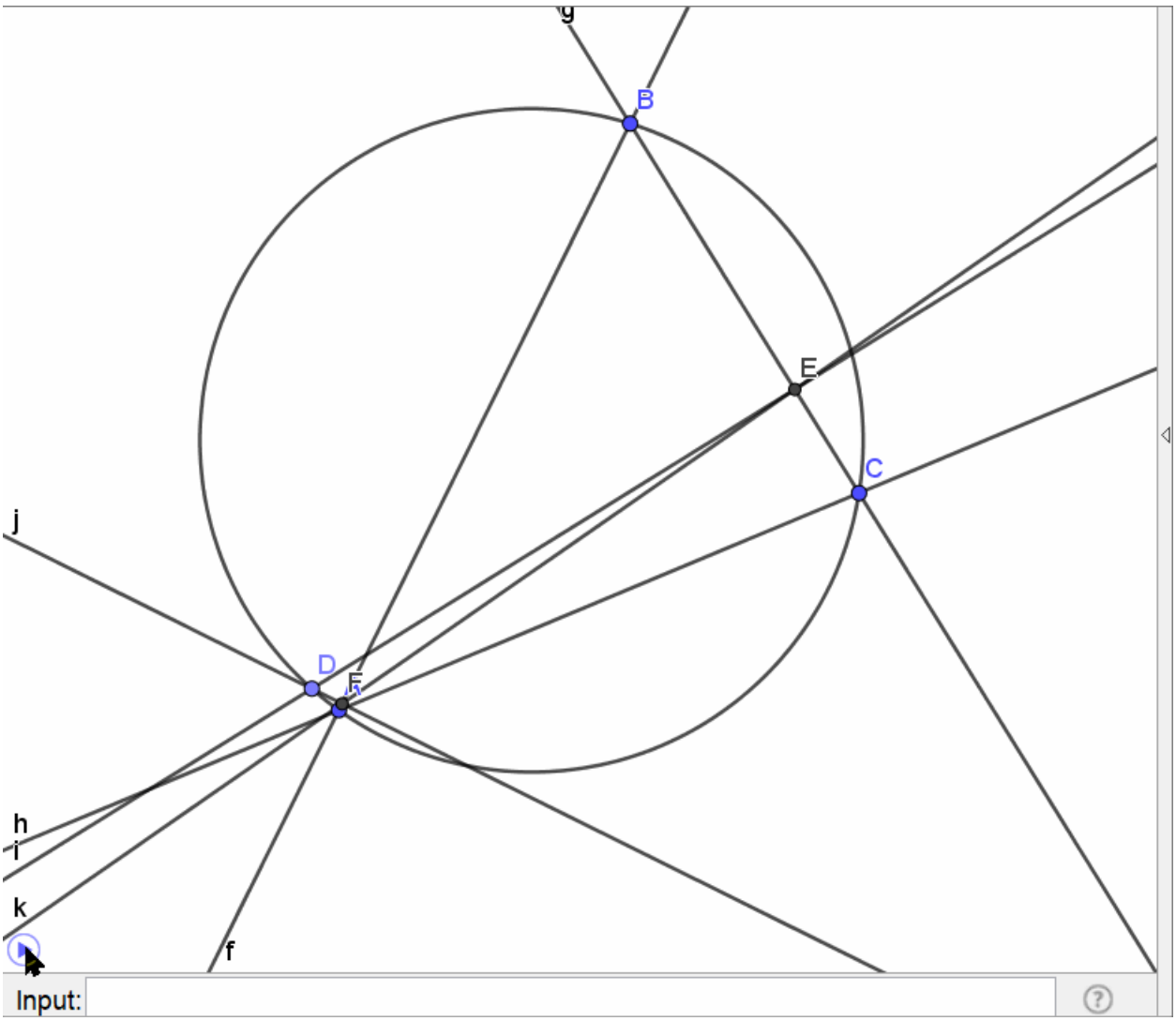
10) Right click on line EF and select “Trace On”



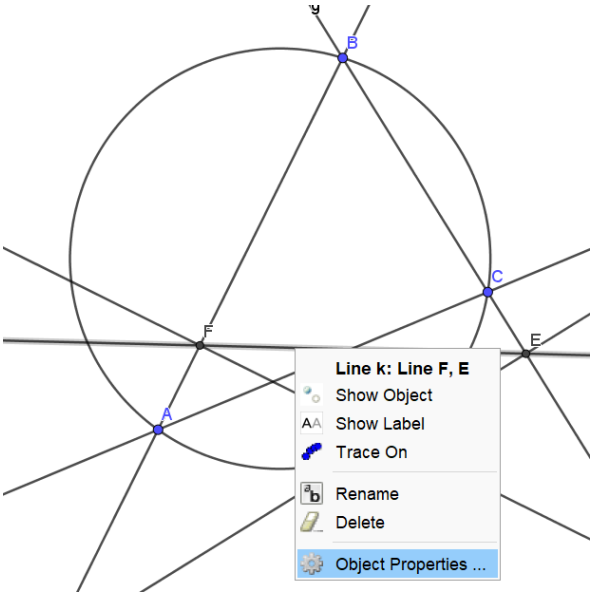
11) Right click on point D and select “Animation On”



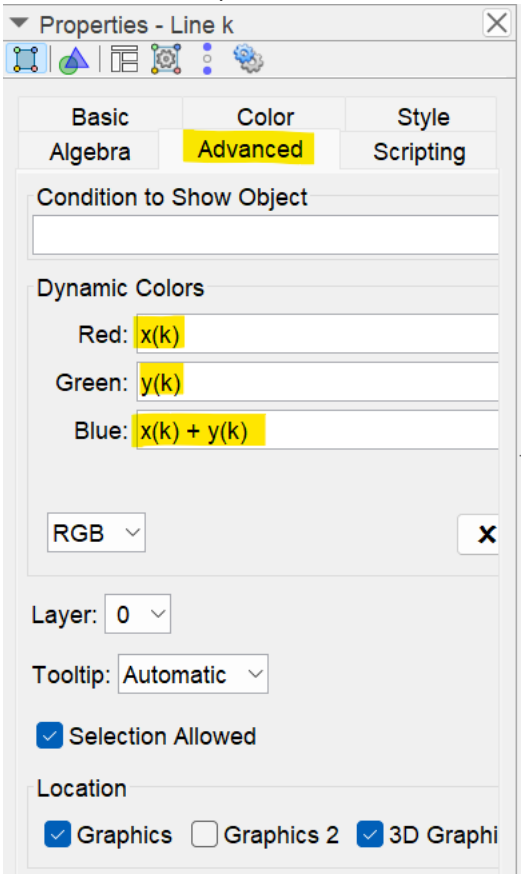
12) Click the arrow that appears on the bottom right.

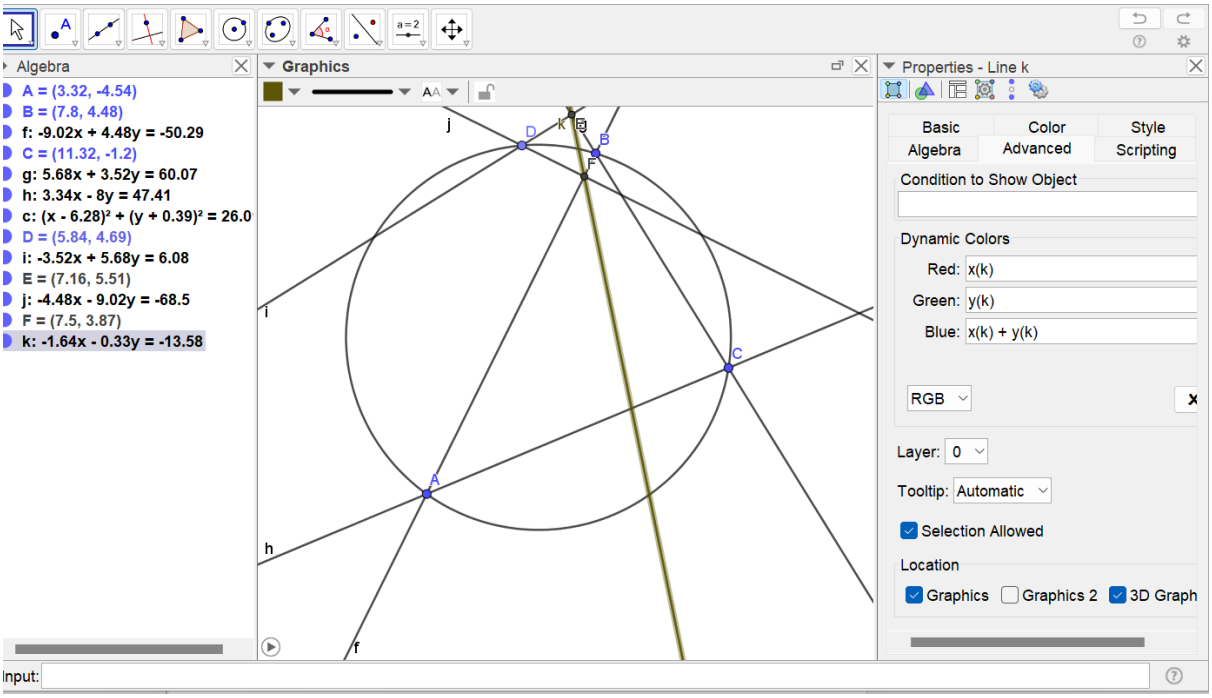


13) To change the color, right click on the line EF and select “Object Properties.”



14) Go to the “Advanced” tab and type in these values. k should be another name for the line EF in your construction. If it is not, then click the line EF and observe what line gets highlighted in the Algebra bar. Then, replace “k” in your Properties→Advanced bar with the name of EF in your construction (another lower case letter).





15) Click the Animation arrow on the bottom left and observe the result.