

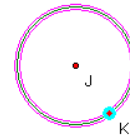
Constructing a Perfect Equilateral Triangle with GSP

Things to know before you start:

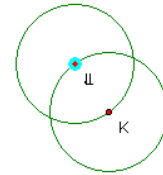
- Properties of an equilateral triangle
- Construction of a circle
- Selecting multiple items
- Deleting points
- Measuring segment lengths and angles
- Terms: circumference, intersection

1. Start a new sketch and draw a medium-sized circle.

2. Draw a second circle, using the point on the circumference of the first circle as the center of the second circle (it will get a blue ring around it when you are exactly on the point).



3. Drag the point on the circumference of the second circle so it coincides with the center of the first circle. The center of the first circle will get a blue ring when this happens.

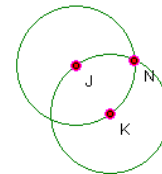


4. You should see that there are only two labels.

5. Select both circles (click on the circumferences); then Construct > Intersections.

6. Delete one of the intersections you just made (doesn't matter which one).

7. Select all three remaining points; then Construct > Segments.



8. Congratulations! You have just created an equilateral triangle. Now, prove that it is one. Once you have made your proof, use a text box to write about how you proved you had indeed made an equilateral triangle – remember your name – then print out the complete sketch with your write-up and name.