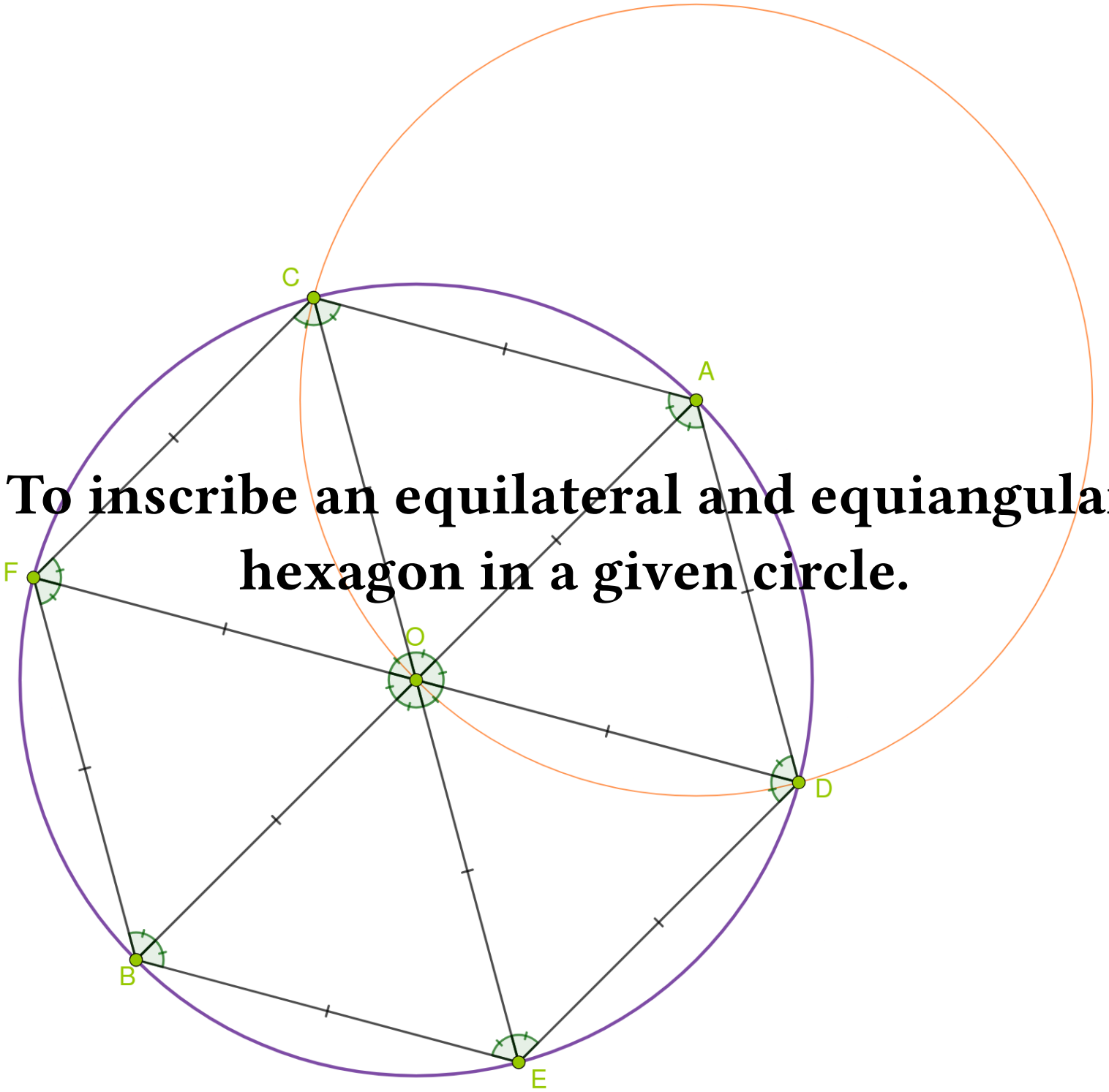
To inscribe an equilateral and equiangular hexagon in a given circle.



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Given a circle, construct its center O by III.1, then draw the diameter AB. Construct the circle centered at A with radius AO. Label the intersections of these two circles as C and D. Draw the diameters CE and DF. Join AC, CF, FB, BE, ED and DA.

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Given a circle, construct its center O by III.1, then draw the diameter AB. Construct the circle centered at A with radius AO. Label the intersections of these two circles as C and D. Draw the diameters CE and DF. Join AC, CF, FB, BE, ED and DA. As they are radii of the same circle, OA, OB, OC, OD, OE, and OF are equal.

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