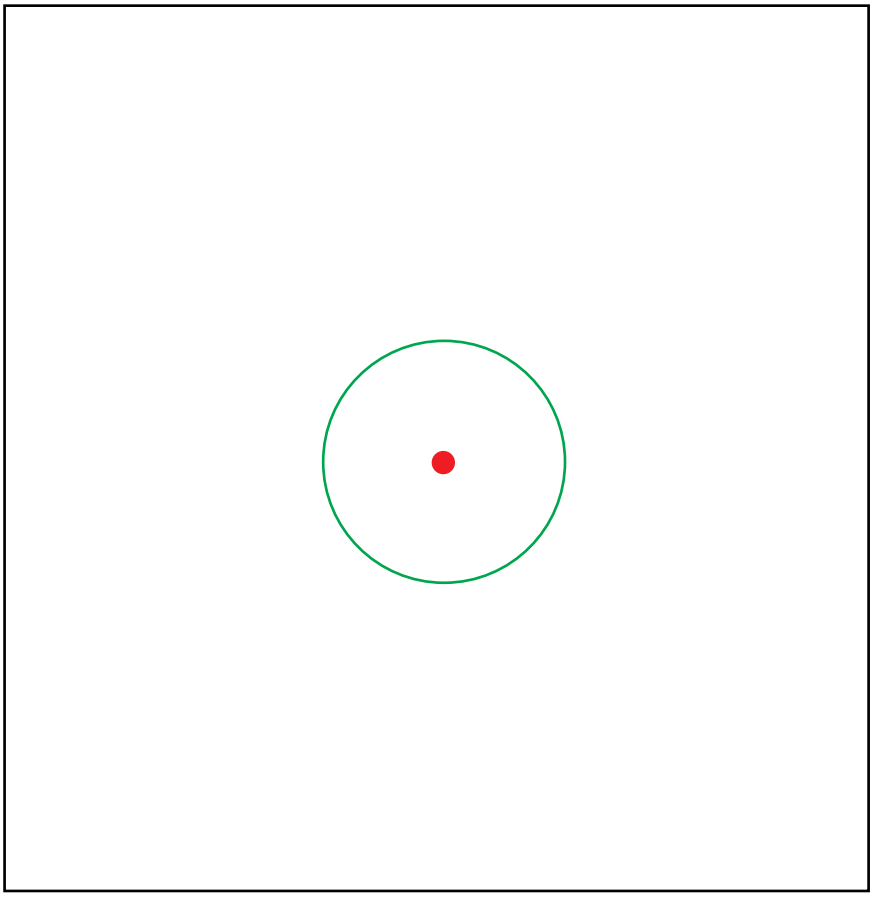
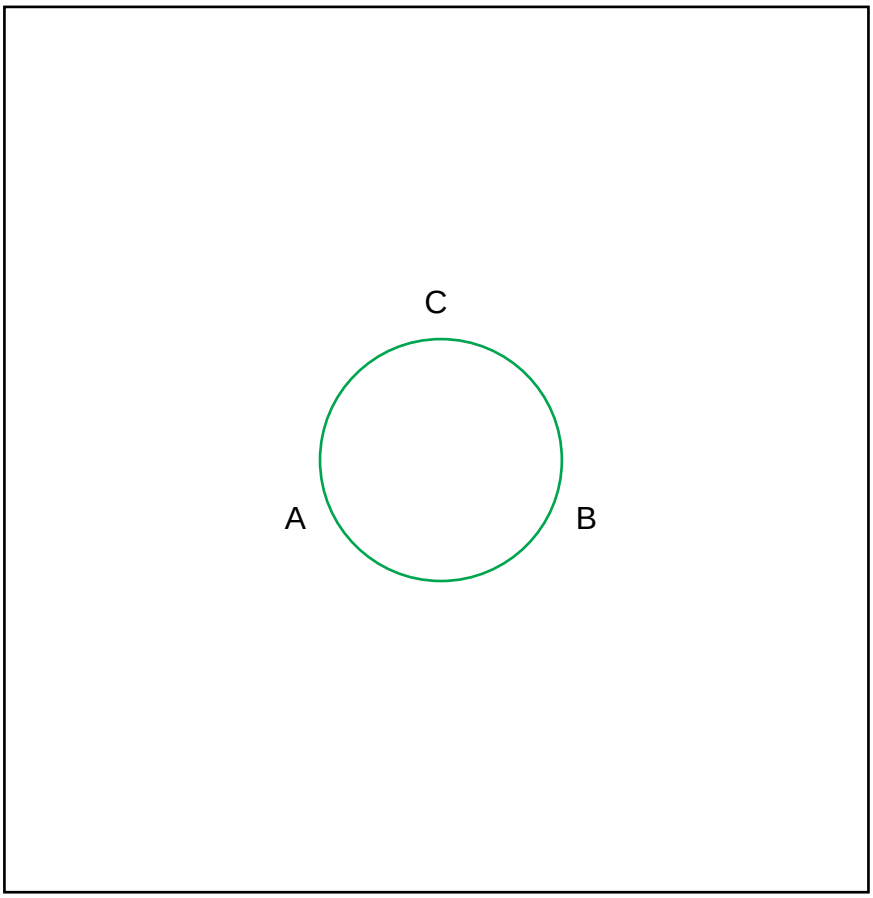
Construction 17: Book III, Proposition 1

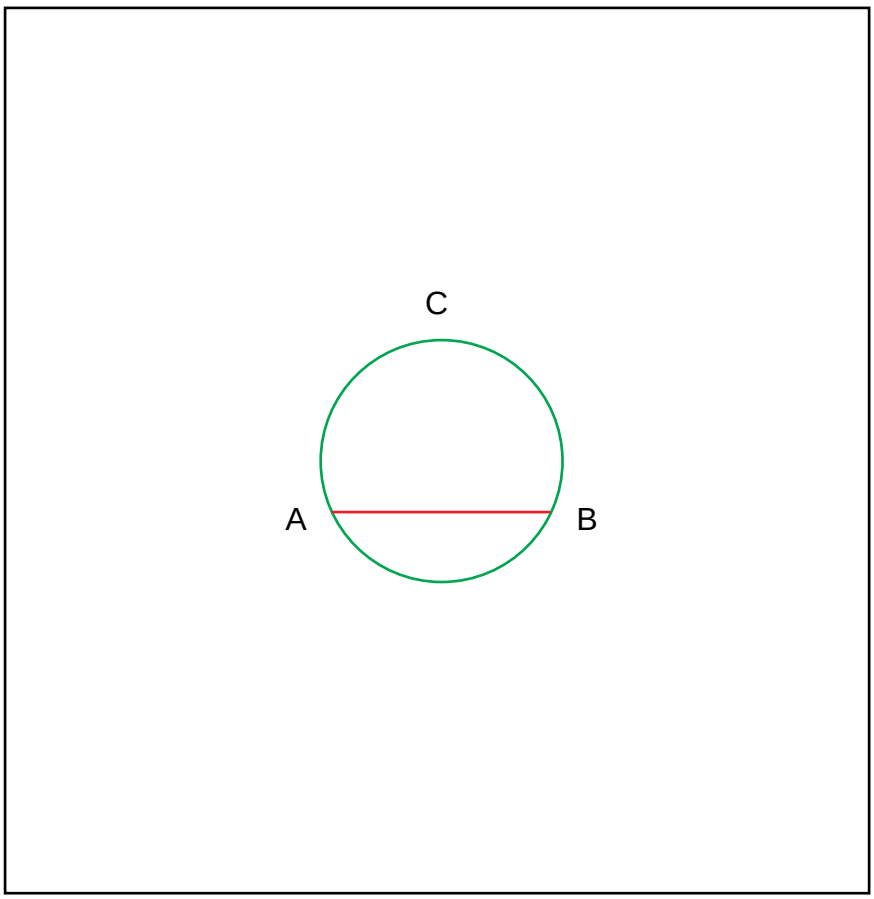
To find the centre of a given circle.



III.1:2. Let ABC be the given circle.

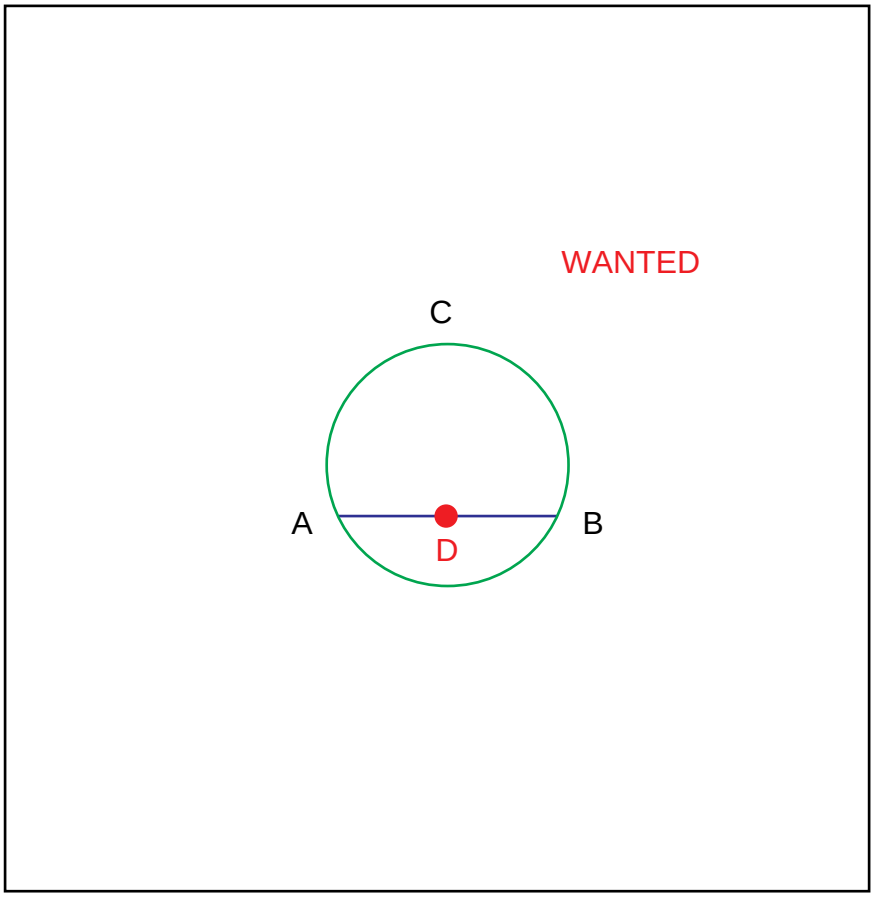


III.1:4. Let a straight line AB be drawn through it at random,

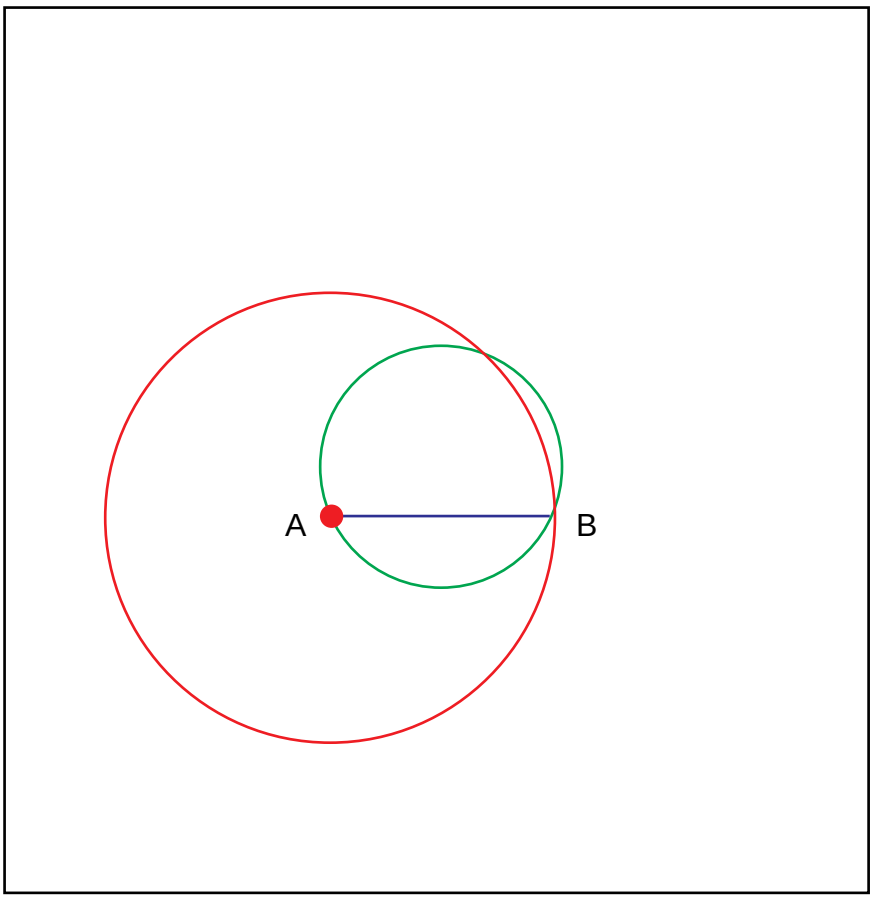


III.1:5. and let it be bisected at the point D; ([I.10])

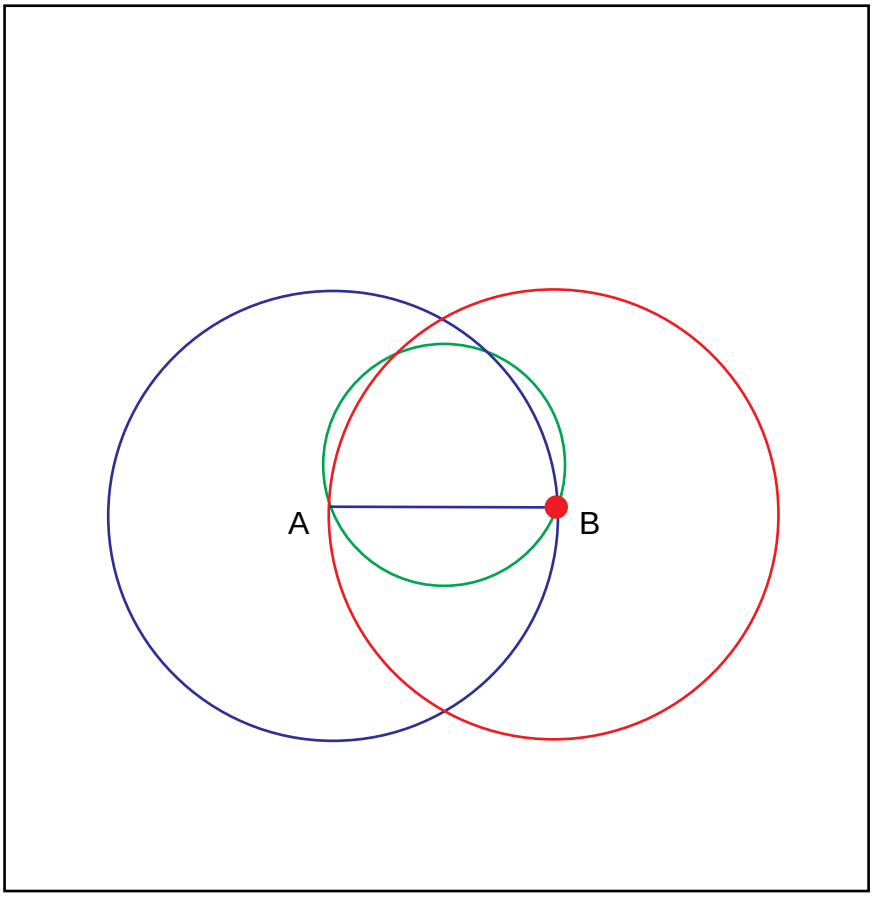
GOSUB I.10.
We will follow C#5B, labels are ok.



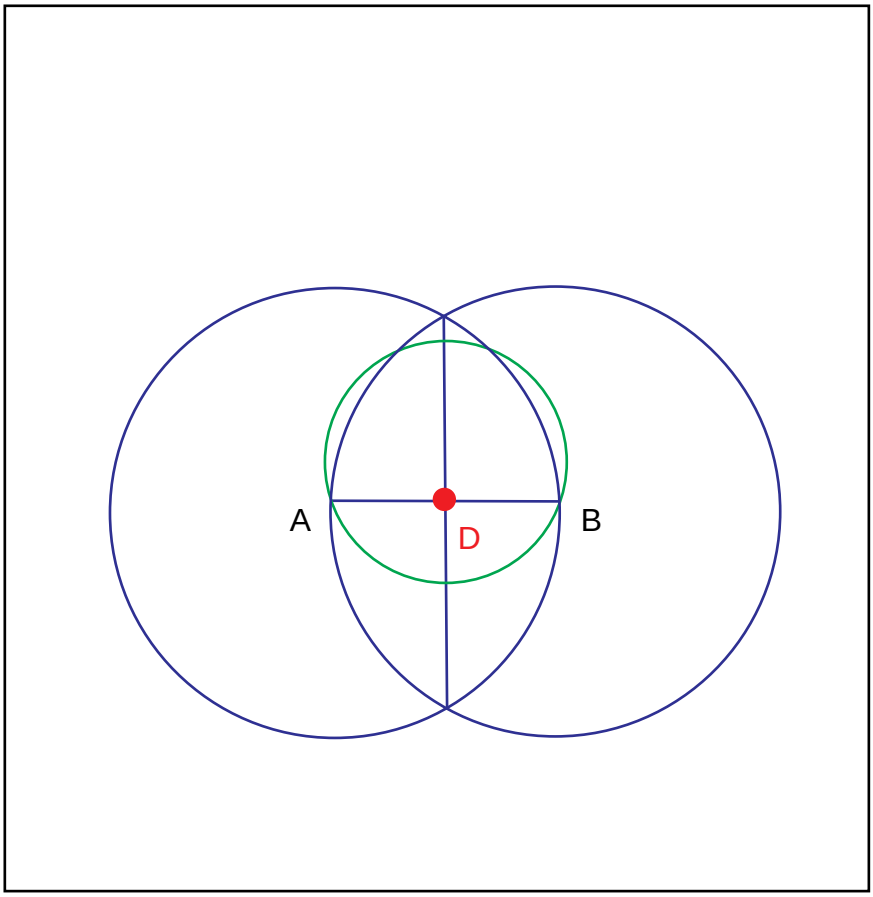
Swing AB around A.



Swing BA around B.



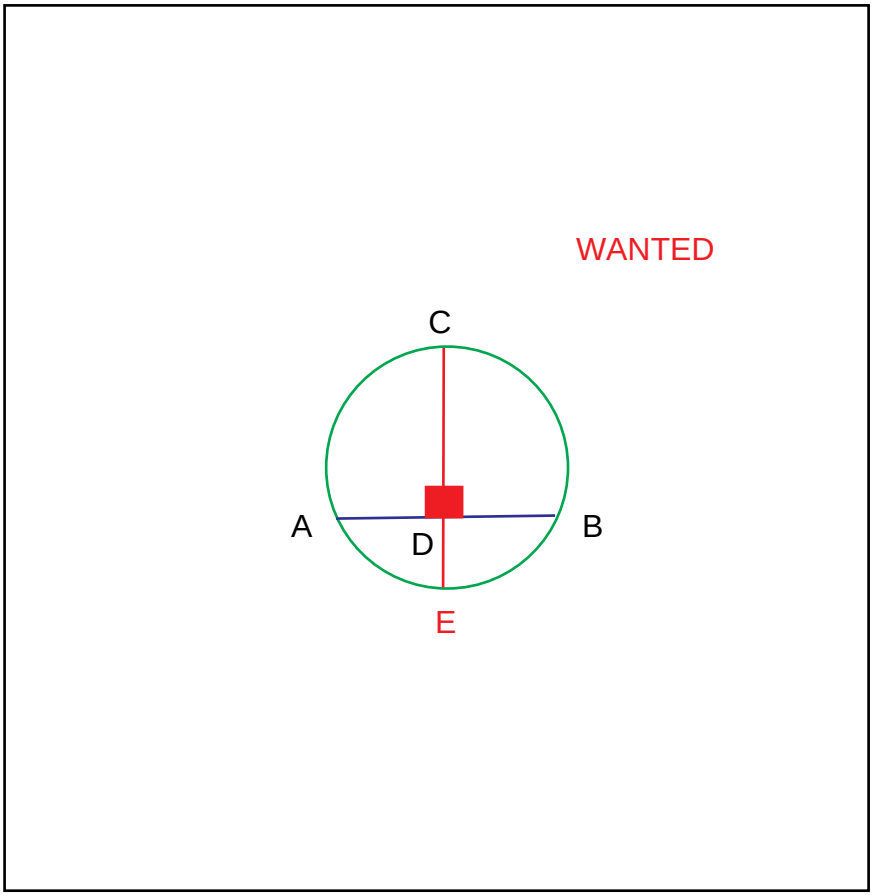
Connect the crossings. Mark the point, D.



Cleanup.
RETURN to III.1 at line 5.

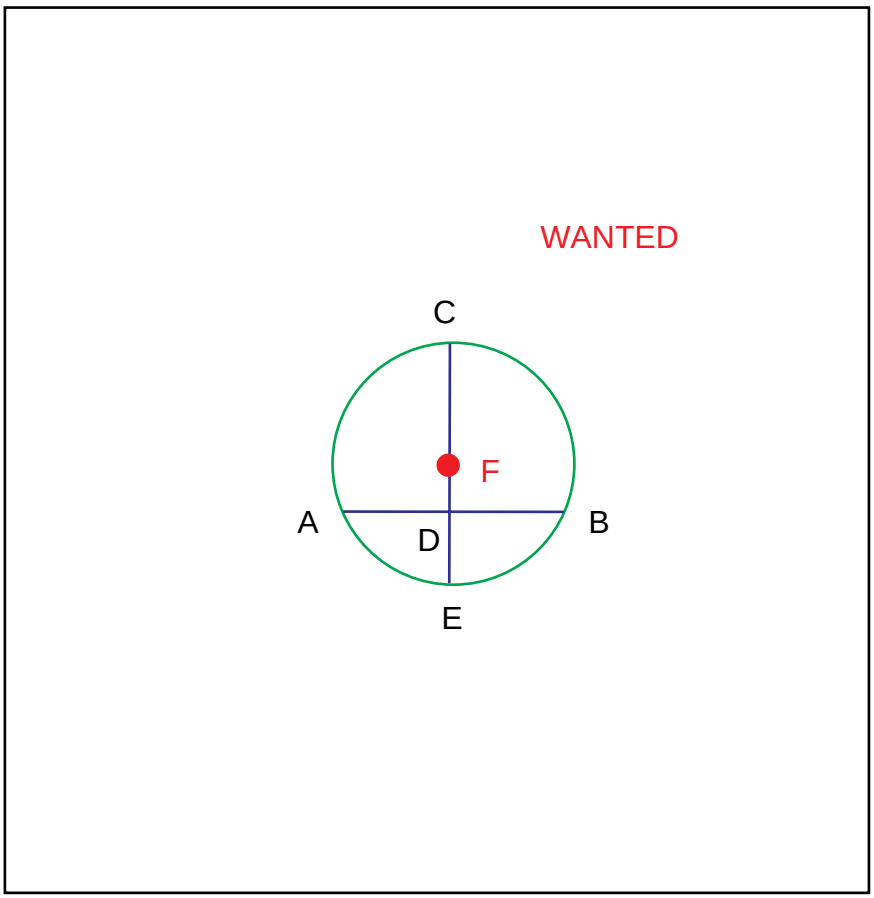
III.1:7. from the point D let DC be drawn at right angles to AB. ([I.11])

NOTE: The Vesica Pisces (steps 2, 3, 4 above) reproduce C#6 (I.11), so we already have the wanted line.

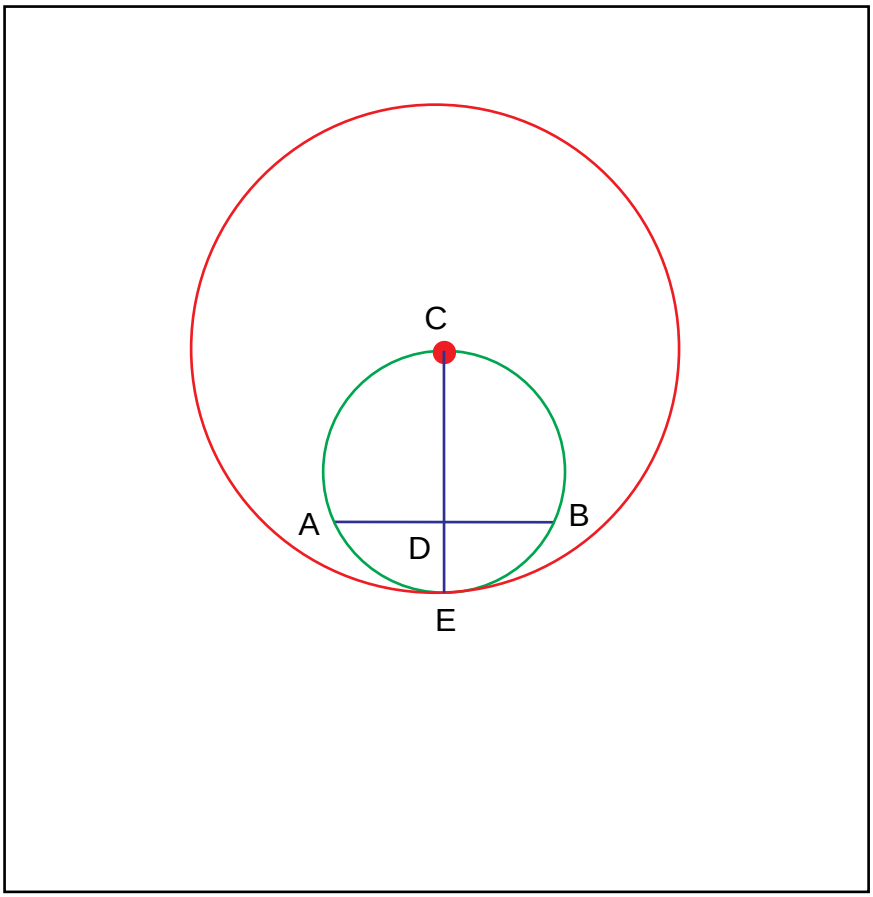


III.1:9. let CE be bisected at F; ([I.10])

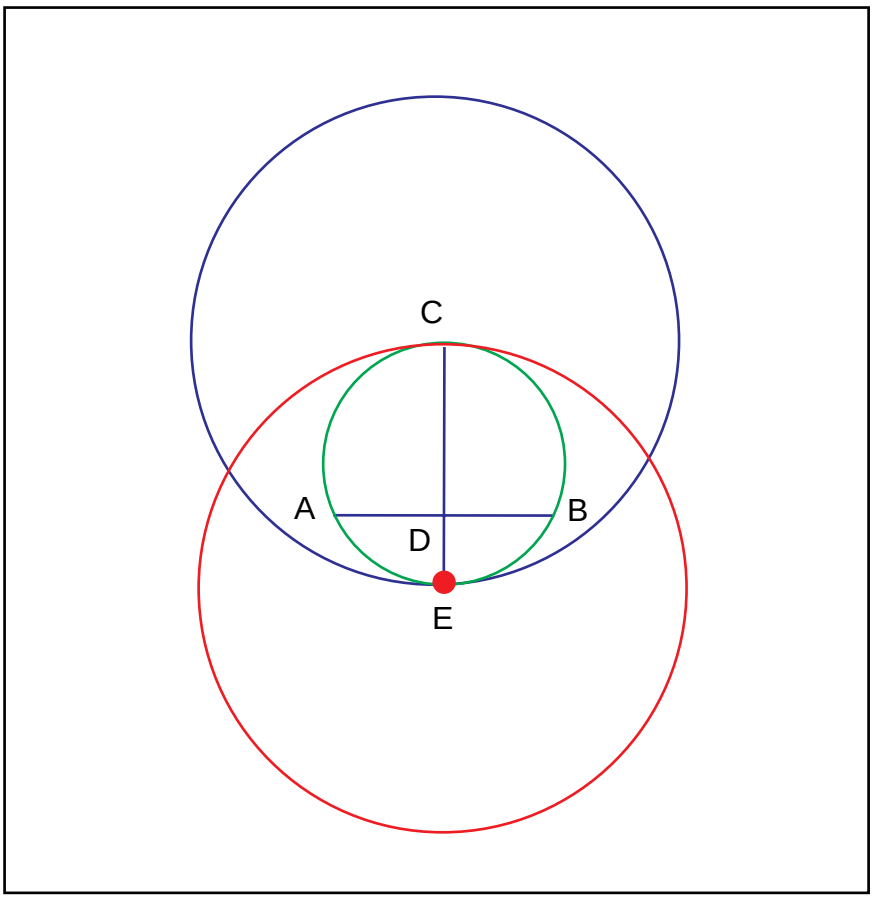
GOSUB I.10 (C#5B) again.



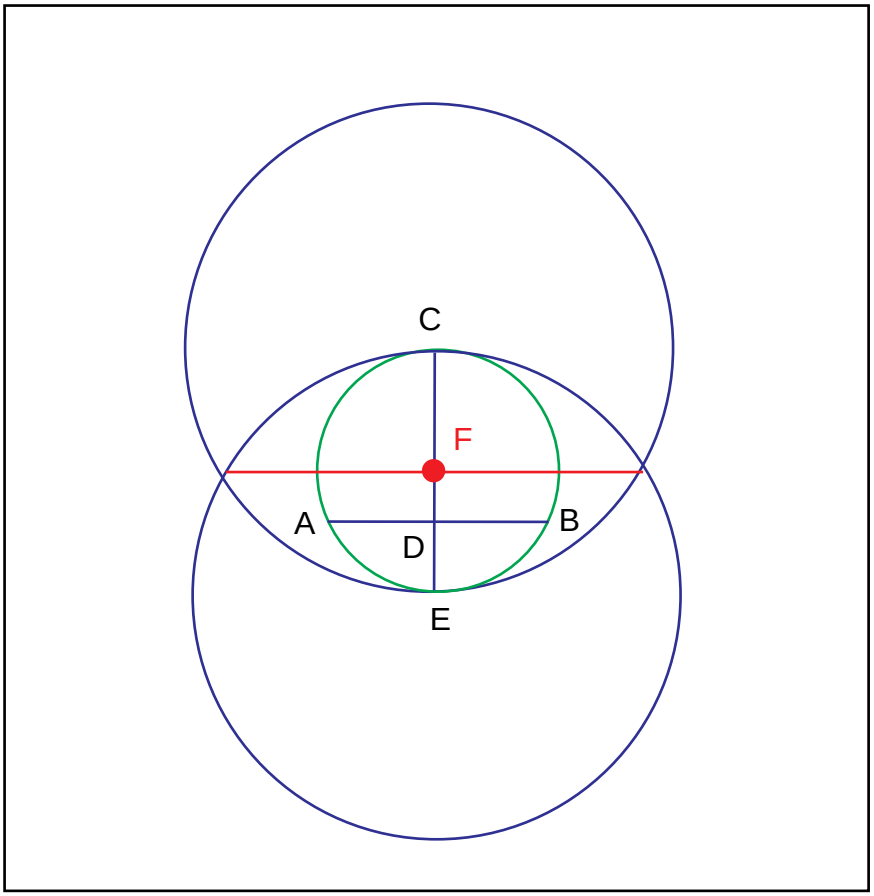
Swing CE around C.



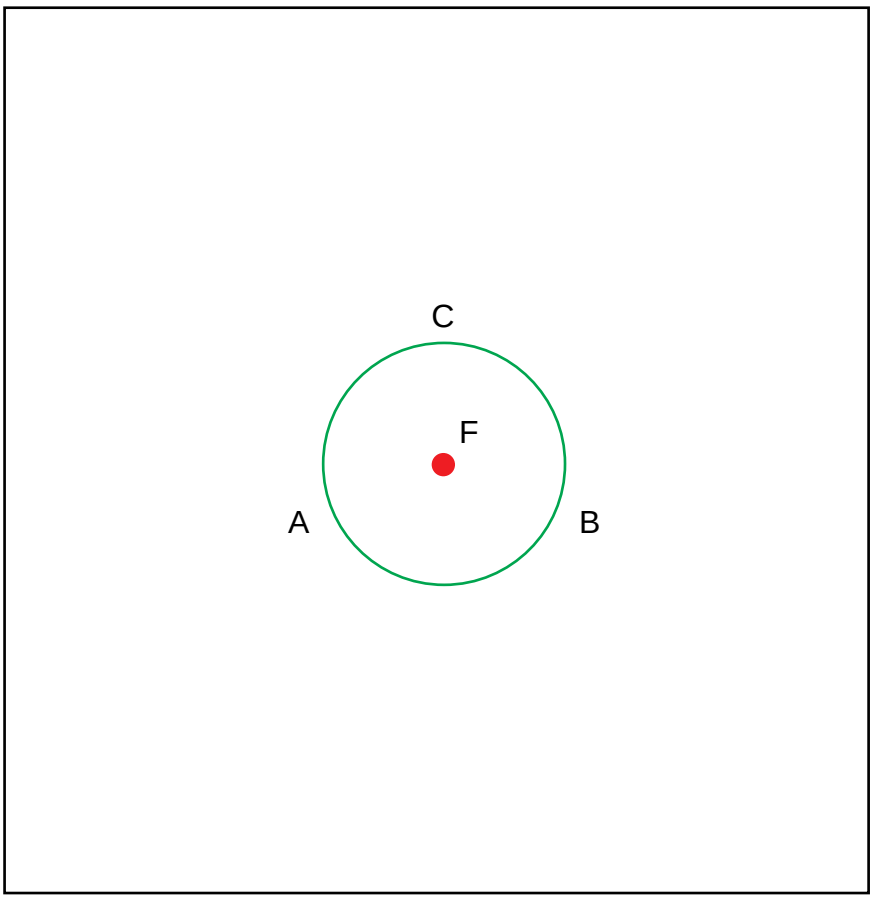
Swing EC around E.



Connect the crossings, mark the point, F.



Cleanup.



Q.E.F.