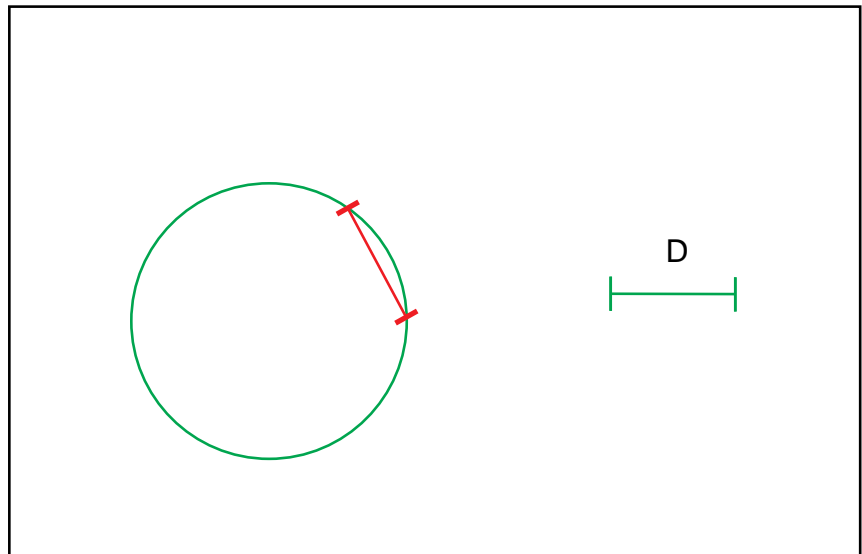# Construction 23: Book IV, Proposition 1

Into a given circle to fit a straight line equal to a given straight line which is not greater than the diameter of the circle.

We will consider only the case in which the given straight line is less than the diameter of the given circle.
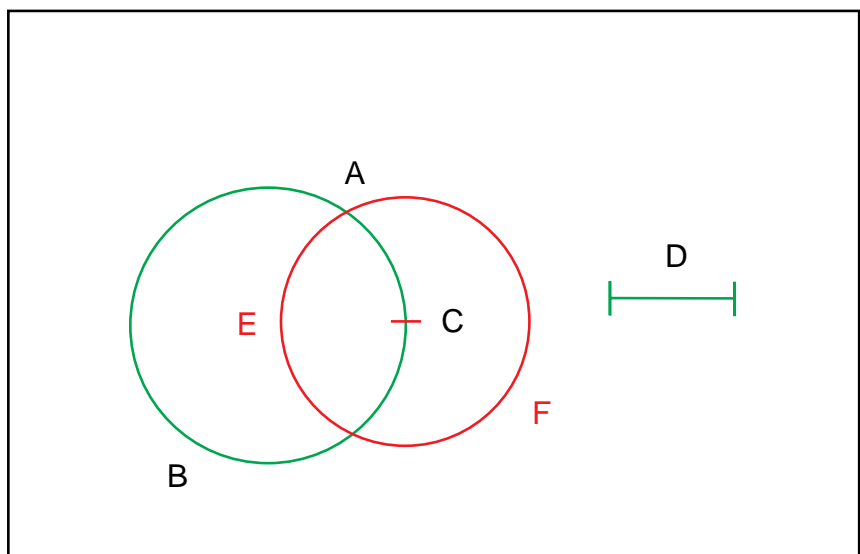
IV.1:4. Let ABC be the given circle, and D the given straight line...;

IV.1:17. (paraphrase) With centre C and distance D let the circle EAF be described;

Note: we set the compass and move it. Euclid would not.

IV.1:19. let CA be joined.

Q.E.F.