Probability and random variables assignment

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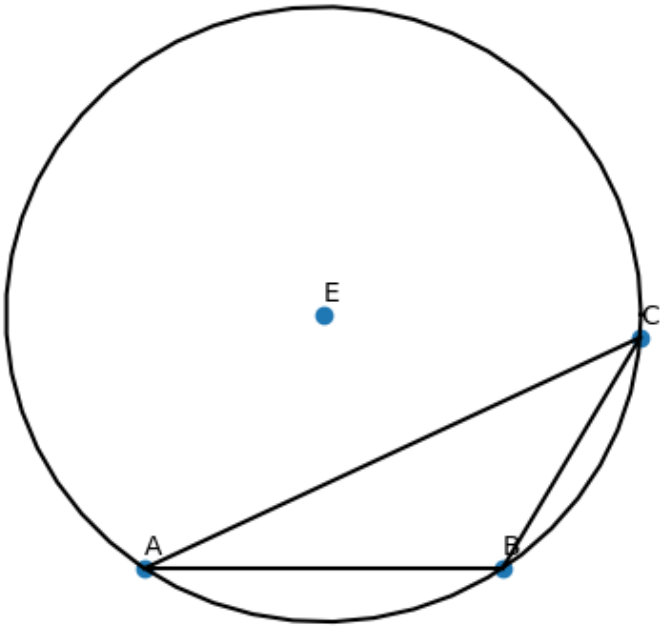
1 Q8 C)

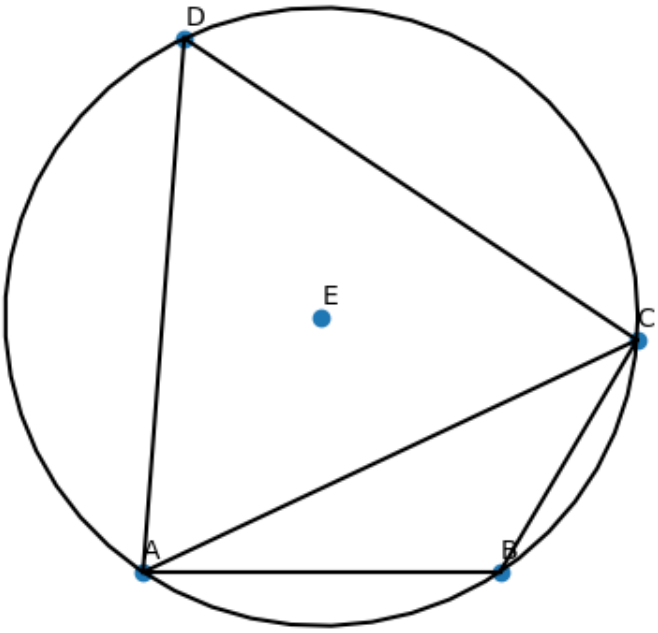
1.1. Using ruler and compass only, construct a $\triangle ABC$ such that BC = 5 cm and AB = 6.5 cm and $\angle ABC = 120°$
(i) Construct a circum-circle of $\triangle ABC$
(ii) Construct a cyclic quadrilateral ABCD, such that D is equidistant from AB and BC.

Solution: (i)



center of the circumcircle is the point of intersection of the perpendicular bisectors of AB and BC.

(ii)



the point D of the cyclic quadrilateral ABCD is the point of intersection of the angle bisectors of AB and BC and the circumcircle.