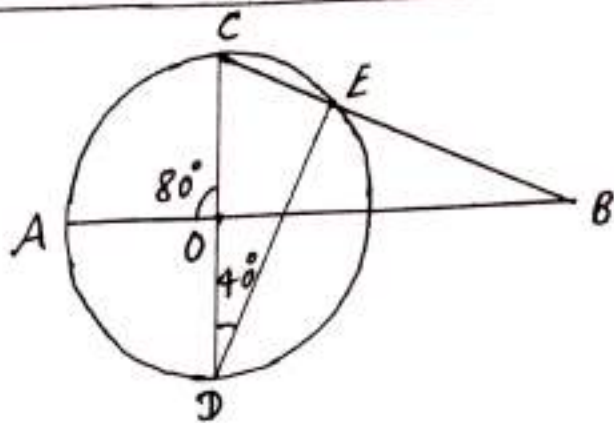
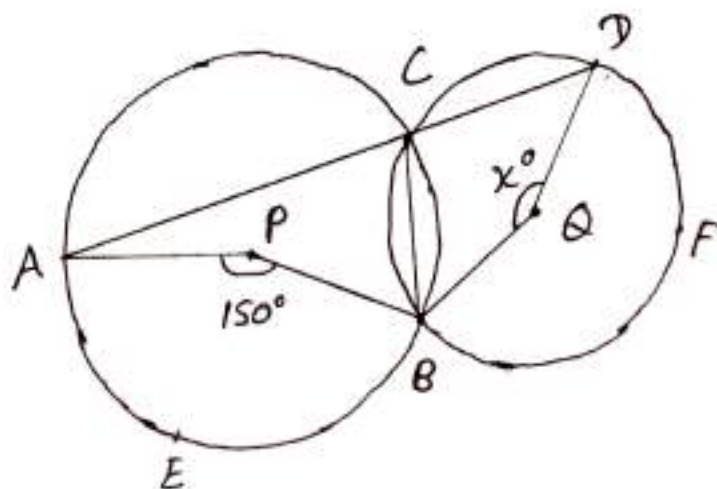


G.N. National Public School, Garhaknath, G.K.P.
 Class - IX Maths Chapter - 10 Circles
 Assignment Part - 5

Q.1 In the given figure, AB and CD are straight lines through the centre O of a circle. If $\angle AOC = 80^\circ$ and $\angle CDE = 40^\circ$, find (i) $\angle DCE$ (ii) $\angle ABC$.

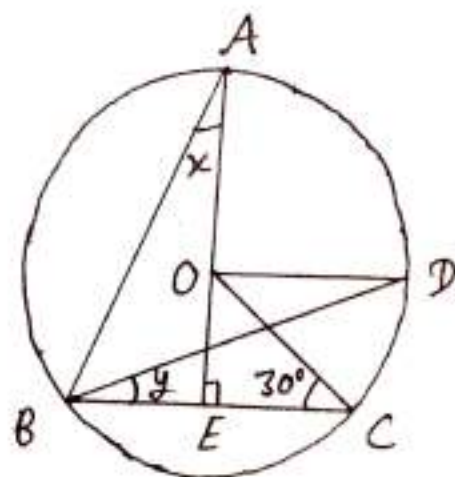


Q.2. In the given figure, P and Q are centres of two circles intersecting at B and C, and ACD is straight line. If $\angle APB = 150^\circ$ and $\angle BQD = x^\circ$, find the value of x .



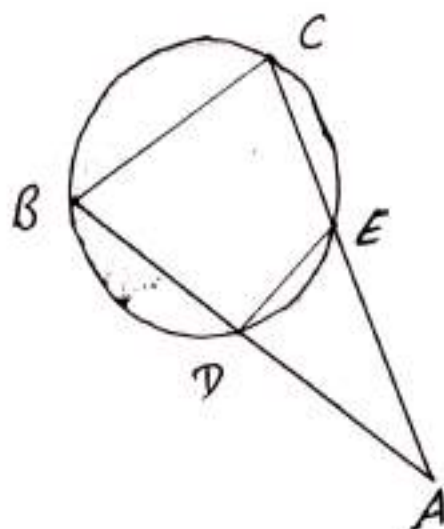
Q.3-

In the given figure, O is the centre of the circle and $\angle BCO = 30^\circ$. Find x and y .

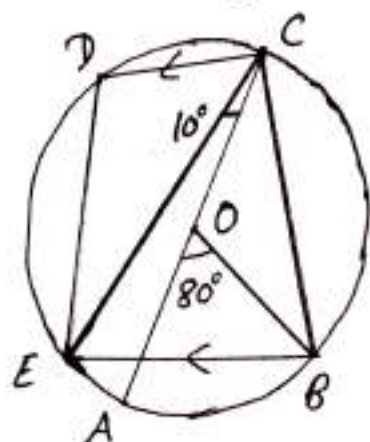


Ch-10 Circle Assignment Part-6

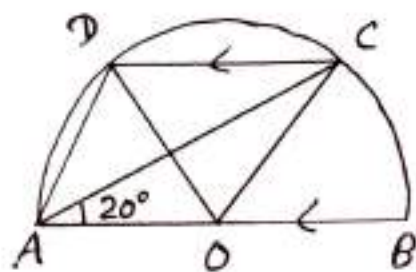
Q.4 In an isosceles triangle, $\triangle ABC$ with $AB = AC$, a circle passing through B and C intersects the side AB and AC at D and E respectively. Prove that $DE \parallel BC$.



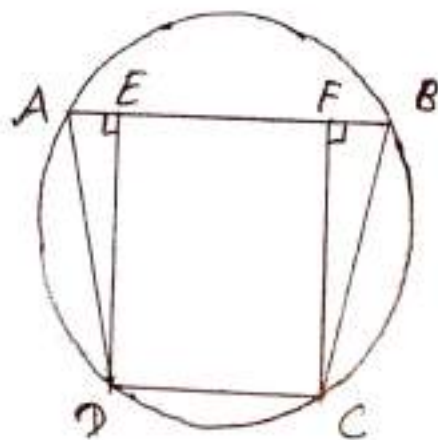
Q.5- In the given figure, AC is a diameter of a circle with centre O . If $CD \parallel BE$, $\angle AOB = 80^\circ$ and $\angle ACE = 10^\circ$, find (i) $\angle BEC$ (ii) $\angle BCD$ (iii) $\angle CED$



Q.6- In the given figure, AB is a diameter of a circle with centre O and $CD \parallel BA$. If $\angle BAC = 20^\circ$, find (i) $\angle BOC$ (ii) $\angle COD$ (iii) $\angle CAD$ (iv) $\angle ADC$.

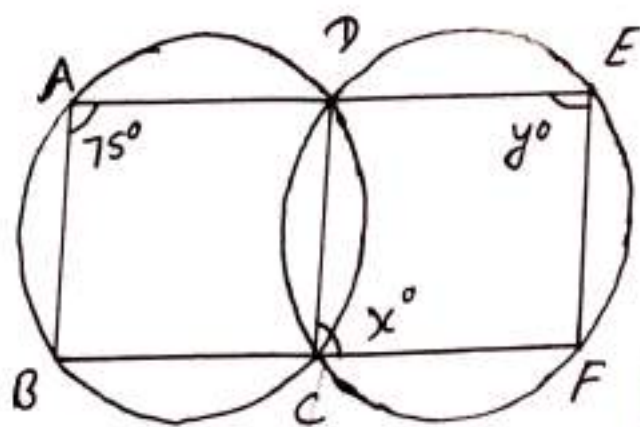


Q.7- In the given figure, $ABCD$ is a quadrilateral in which $AD = BC$ and $\angle ADC = \angle BCD$. Show that the points A, B, C, D lie on a circle.



Ch-10 Circles Assignment Part-7

Q.8- In the given figure,
 $\angle BAD = 75^\circ$, $\angle DCF = x^\circ$
 and $\angle DEF = y^\circ$. Find
 the values of x and y .



Q.9- In the given figure, AB
 is a diameter of a circle
 with centre O and $DO \parallel CB$.
 If $\angle BCD = 120^\circ$, calculate
 (i) $\angle BAD$ (ii) $\angle ABD$
 (iii) $\angle CBD$ (iv) $\angle ADC$
 Also, show that $\triangle AOD$ is
 an equilateral triangle.

