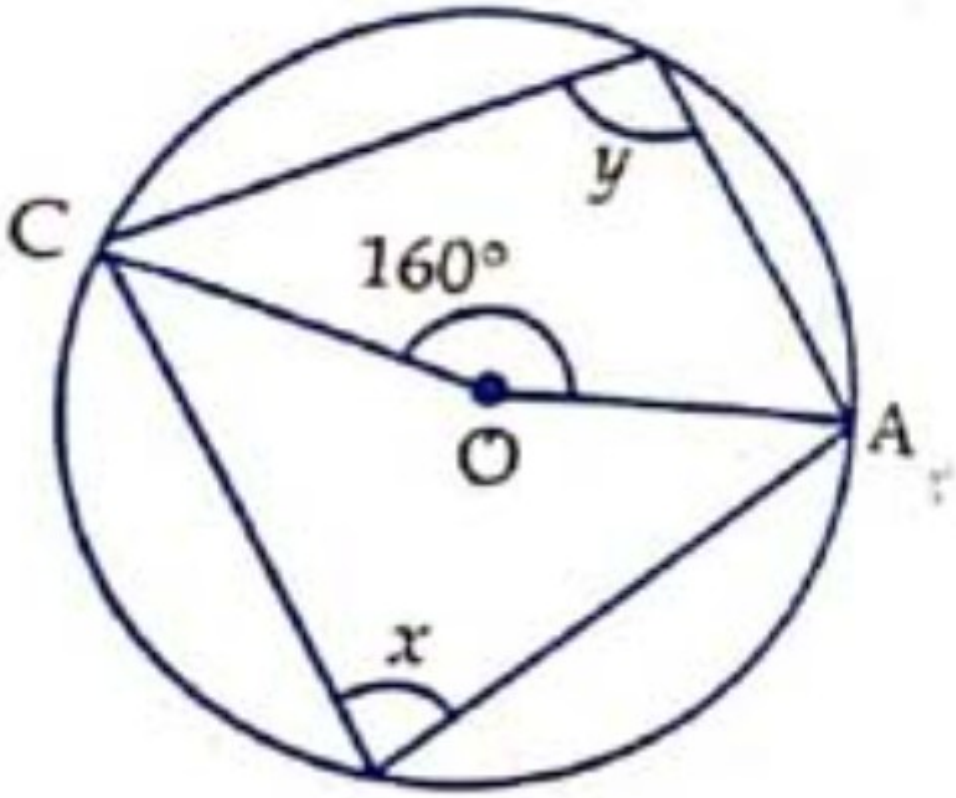
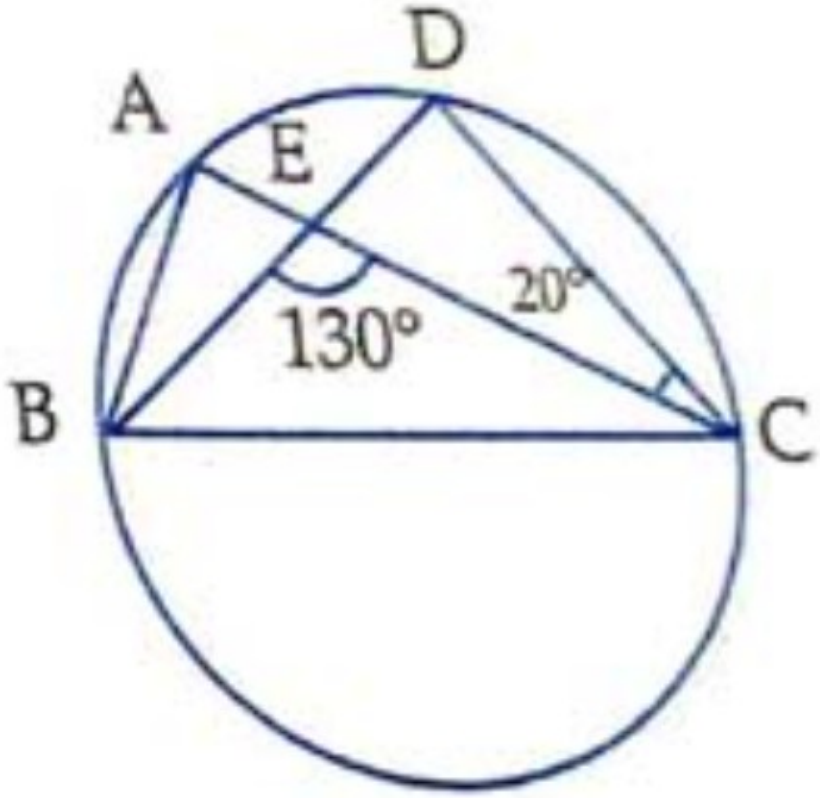
Circles

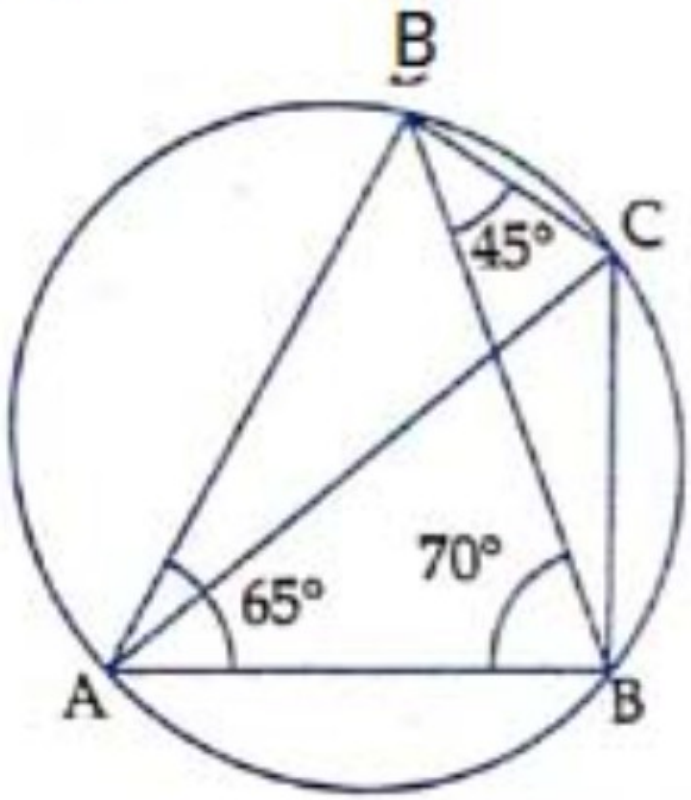
Q.1 In the adjoining figure, O is the centre of the circle and ∠AOC = 60°. Prove that 3∠y - 2∠x = 140°



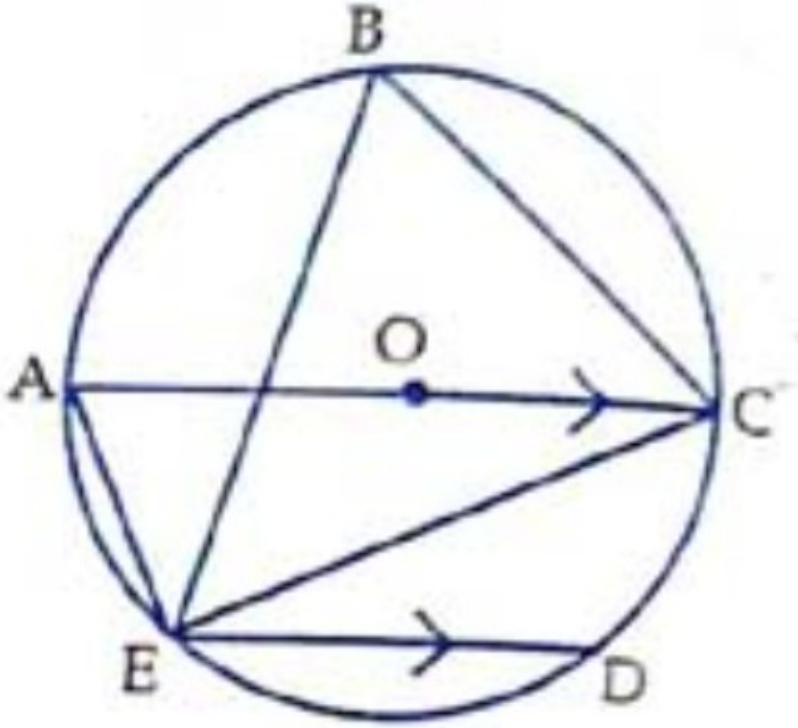
Q2 In the adjoining figure, A, B, C and D are four points on a circle. AC and BD intersect at a point E. If ∠BEC = 130° and ∠ECD = 20°, find ∠BAC

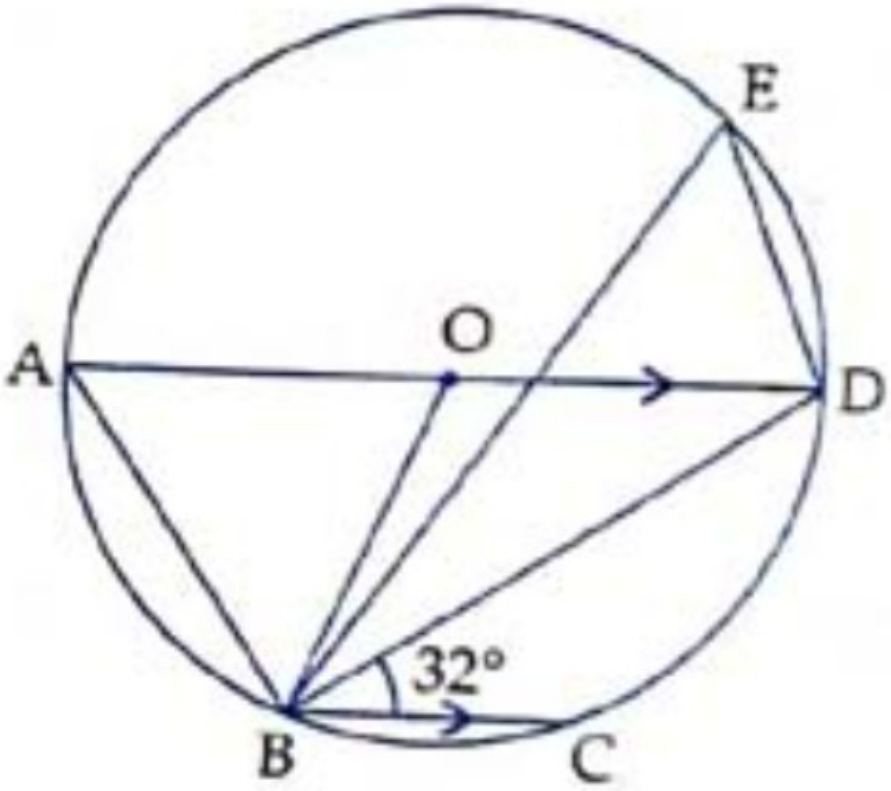


Q3 In the given figure, ∠BAD = 65°, ∠ABD = 70° and ∠BDC = 45°. (i) Prove that AC is a diameter of the circle. (ii) Find ∠ACB



Q4 In the adjoining figure, ED is a chord parallel to the diameter AC of the circle ABCDE. If ∠CBE = 63°, calculate ∠DEC



Solution

Q5 In the adjoining figure, AD is a diameter of a circle with centre 0. If AD is parallel to BC and ∠CBD = 32°, find (i) ∠OBD (ii) ∠AOB (iii) ∠BED