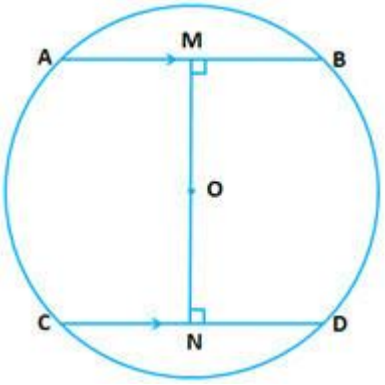
Maths Revision Test

Time : 60 mins

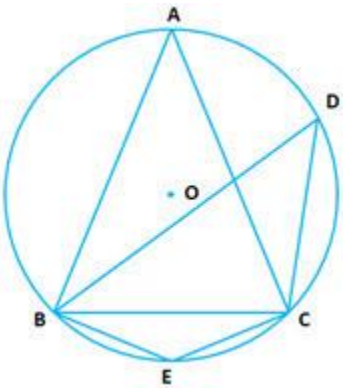
Max Marks : 30

Q1. In the figure, given below, AB and $CD$are two parallel chords and O is the center. If the radius of the circle is $15\ cm$, find the distance MN between the two chords of lengths $24\ cm$ and $18\ cm$ respectively



3 marks

Q2. In the given diagram,$\angle DBC = 58^o$, $BD$is a diameter of the circle. Calculate:
(i) $\angle BDC$ (ii) BEC (iii) $\angle BAC$

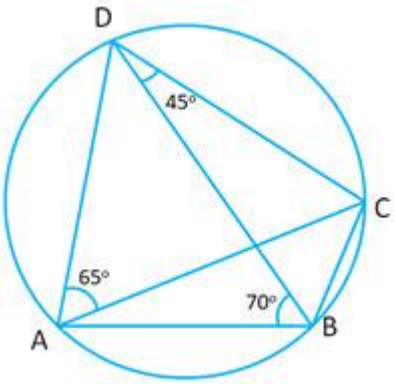


3 marks

Q3. In the given figure, $\angle BAD = 65^o, \angle ABD = 70^o$ and $\angle BDC = 45^o$.

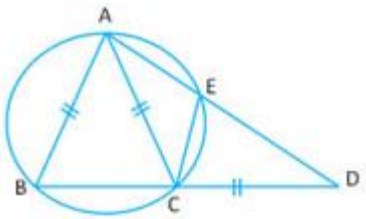
(i) Prove that AC is a diameter of the circle.

(ii) find $\angle ACB$



3 marks

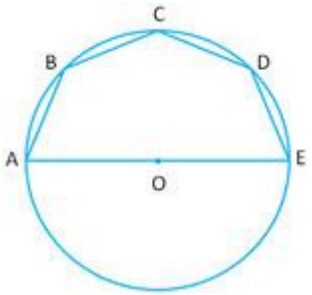
Q4 In the given figure $AB = AC = CD$and $\angle ADC = 38^o$, calculate



(i) $\angle ABC$ (ii) $\angle BEC$

3 marks

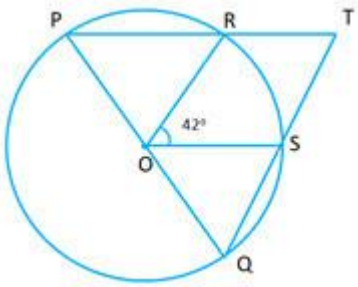
Q5 In the given figure, AE is the diameter of the circle. Write down the numerical



value of $\angle ABC + \angle CDE$. Give reasons for your answer.

3 marks

Q6.In the given figure PQ is the diameter of the circle whose center is O.



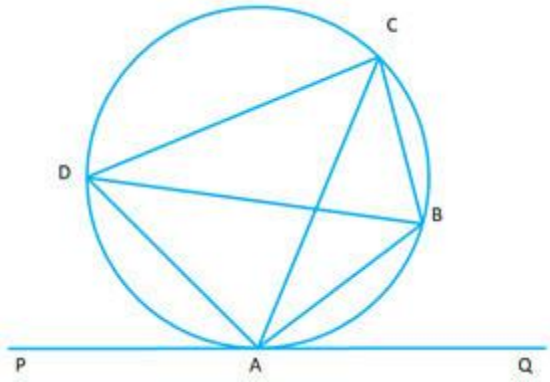
Given $\angle ROS = 42^o$, calculate $\angle RTS$.

3 marks

Q7. In the given figure PQ is a tangent to the circle at A, AB and AD are bisectors of $\angle CAQ$ and $\angle PAC$, if $\angle BAQ = 30^o$ prove that:

BD is a diameter of the circle

ABC is an isosceles triangle.



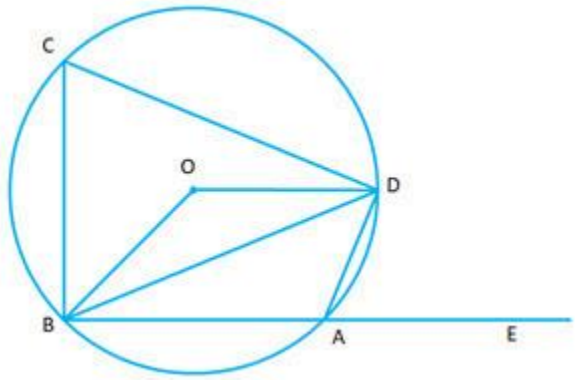
3 marks

Q8.In the figure given, O is the center of the circle. $\angle DAE = 70^o$. Find giving suitable reasons, the measure of: [4]

(i) $\angle BCD$

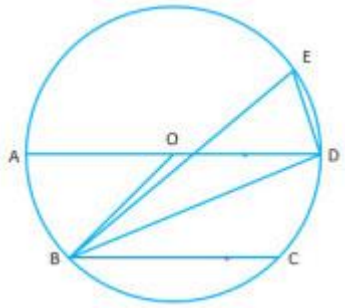
(ii) $\angle BOD$

(iii) $\angle OBD$



3 marks

Q9. In the given figure below, AD is the diameter. $O$is the center of the circle. AD is parallel to BC and $\angle CBD = 32^o$. Find: i) $\angle OBD$ ii) $\angle AOB$ iii) $\angle BED$



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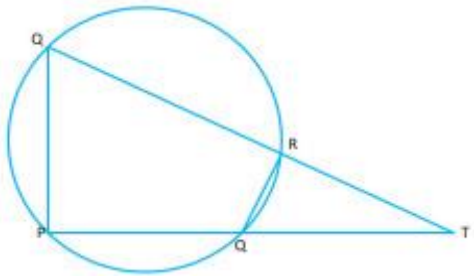
4 marks

Q 10



In the given figure $PQRS$ is a cyclic quadrilateral $PQ\ and\ RS$ produced meet at point T.

i) Prove $\triangle TPS \sim \triangle TRQ$
ii) Find. $SP\ if\ TP = 18\ cm, RQ = 4\ cm\ and,\ TR = 6\ cm$
iii) Find area, of quadrilateral $PORS$ if area of $\triangle PTS = 27\ cm^2$