

MATHEMATICS

CIRCLE PROPERTIES

Total Marks: 20

Duration: 0 hours, 25 minutes

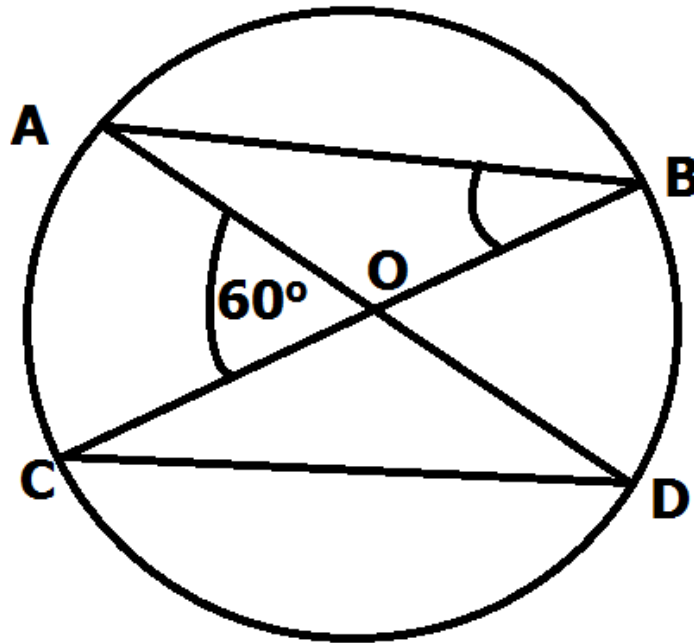
Instructions to test takers

1. Answer all the questions in this paper
2. All the answers for the questions in this paper will be found on **Study Star** (www.studystar.me)
3. Using the answers on the website, mark yourself truthfully and carefully.

Turn this page, time yourself and begin the test

Section

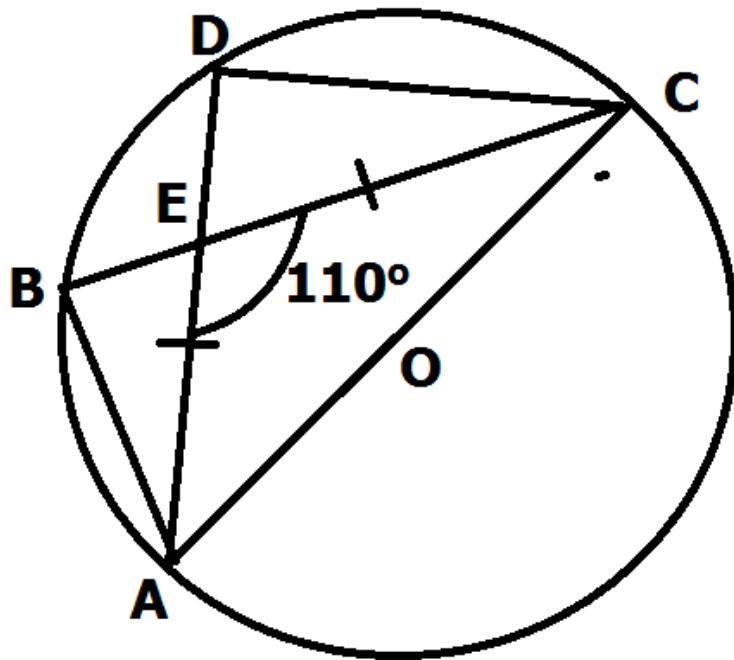
1. Study the diagram below to answer the questions below.



Find angle ABC

-
2. Find angle ADC from question 1 above.

-
3. Study the diagram below of a circle.

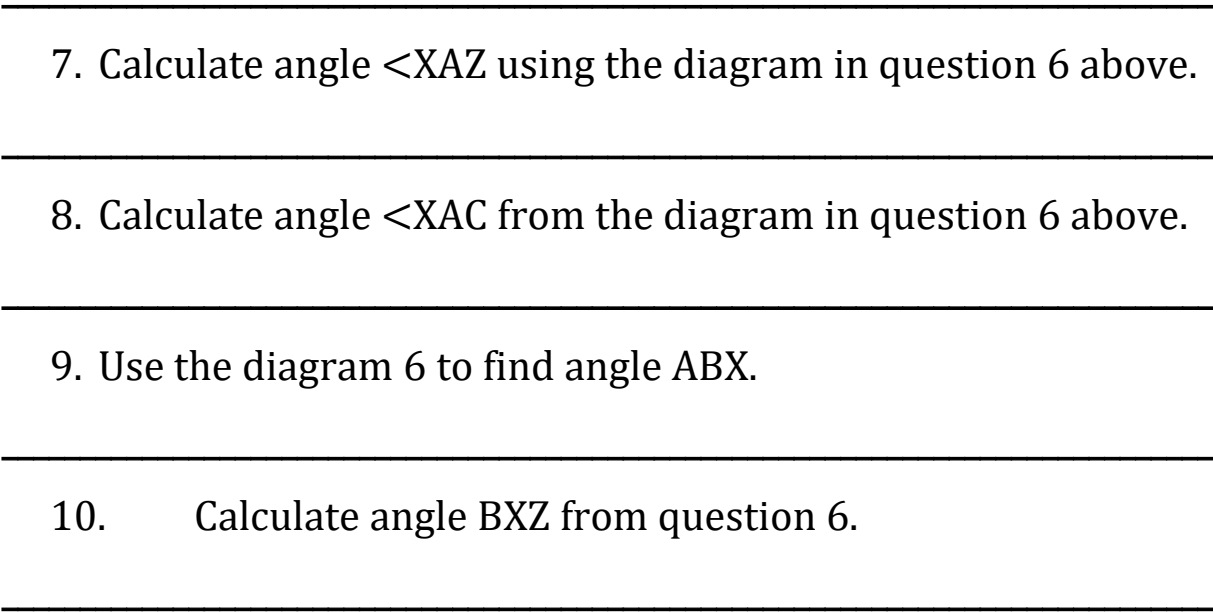


Find angle ABC

4. Calculate $\angle EAC$ from question 3 above.

5. Calculate $\angle BAE$ from question 3 above.

6. Study the diagram below.



7. Calculate angle $\angle XAZ$ using the diagram in question 6 above.

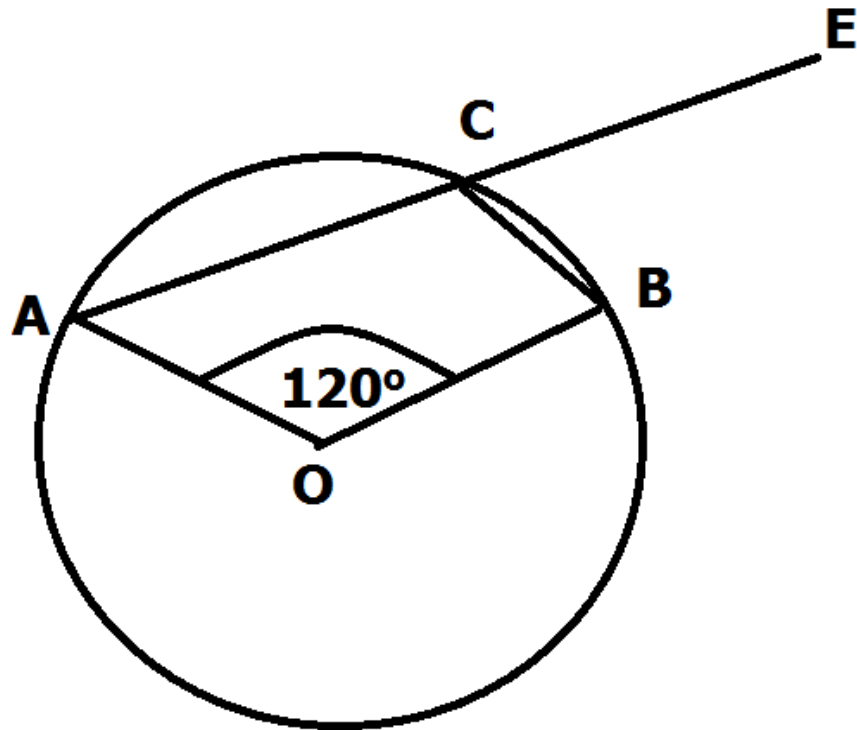
8. Calculate angle $\angle XAC$ from the diagram in question 6 above.

9. Use the diagram 6 to find angle $\angle ABX$.

10. Calculate angle $\angle BXZ$ from question 6.

Section B

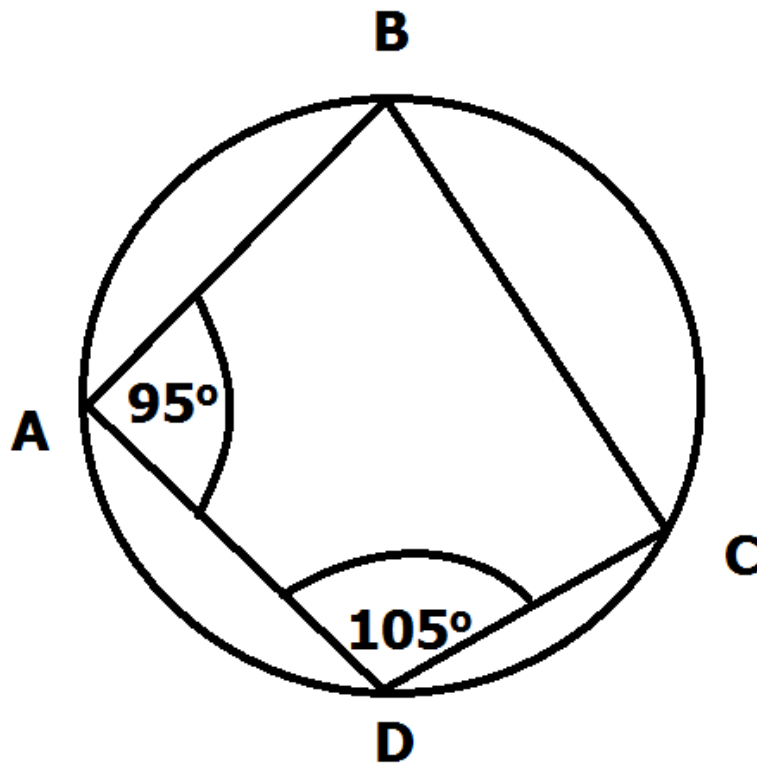
11. Study the diagram below.



Calculate angle ACB . [2]

12. Use question 11 to find angle ECB . [2]
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13. Study the diagram below.



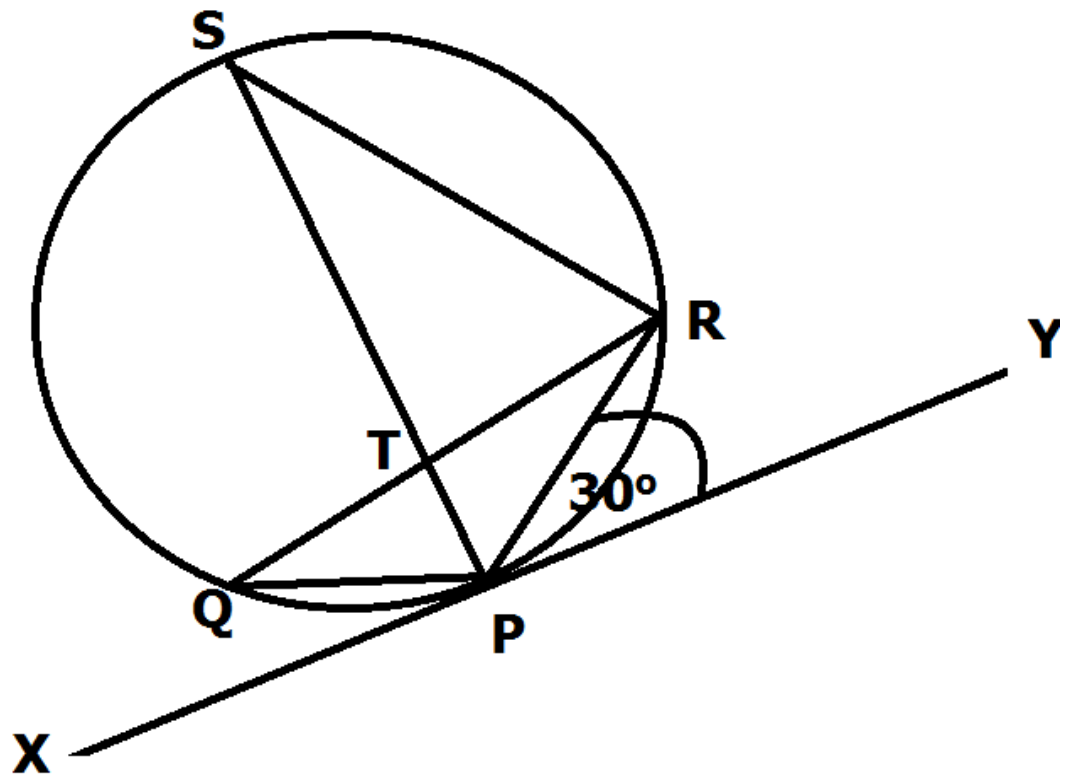
Calculate angle BCD .

[2]

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14. Calculate angle ABC from the above diagram.

[2]

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15. In the diagram below, line XY is a tangent to a circle at P .



Calculate angle PQT

[2]



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