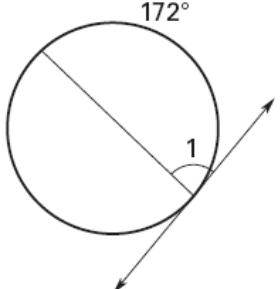


Geometry
Assignment 9.4

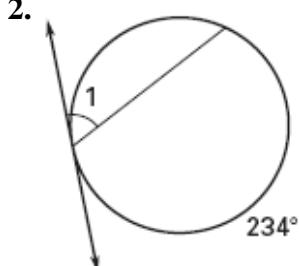
Name: _____

Find $m\angle 1$ or the value of x .

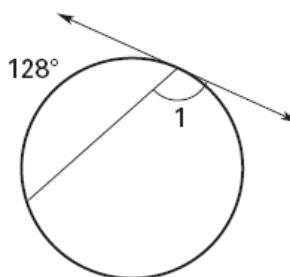
1.



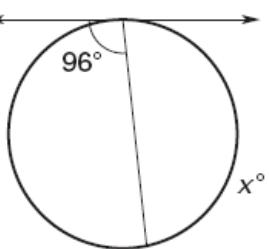
2.



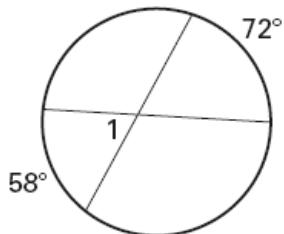
3.



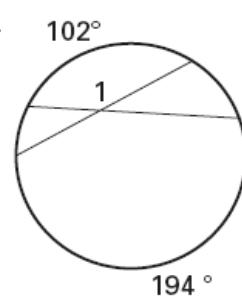
4.



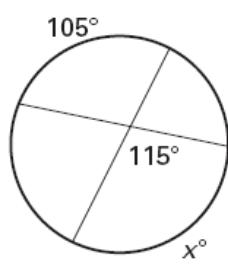
5.



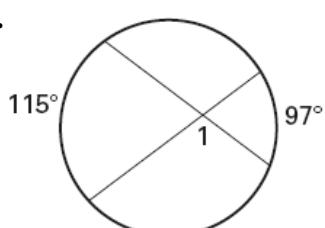
6.



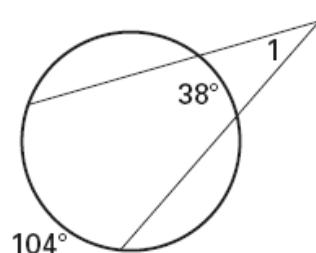
7.



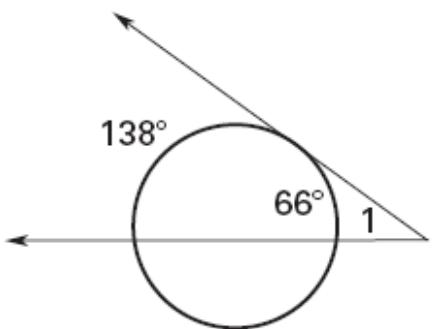
8.



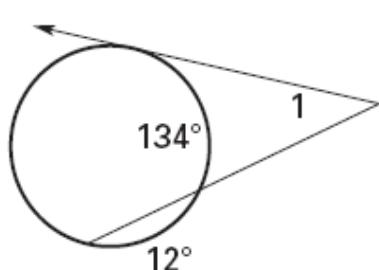
9.



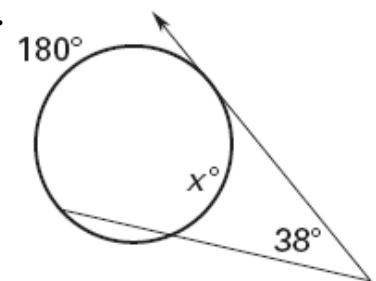
10.



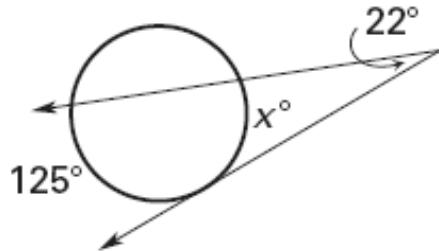
11.



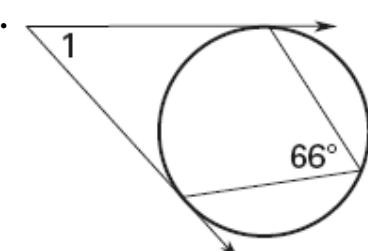
12.



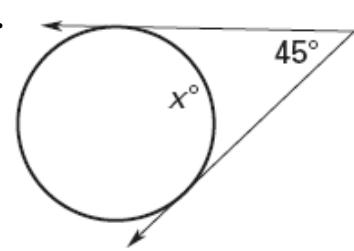
13.



14.

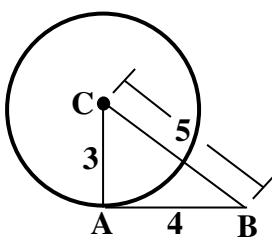


15.



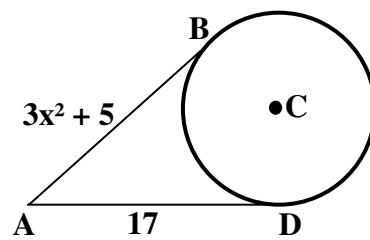
Determine whether \overline{AB} is tangent to $\odot C$.

16.

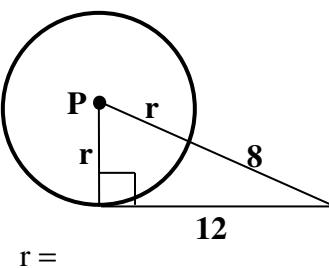


B and D are points of tangency.
Find the value of x.

17.



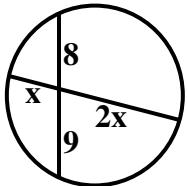
18. Find the value of the variable.



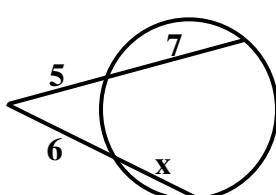
$$r = \underline{\hspace{2cm}}$$

Find the value of x.

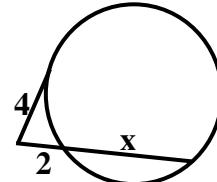
19.



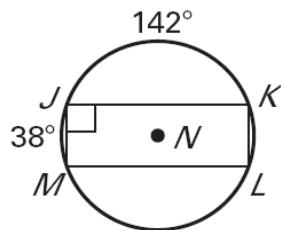
20.



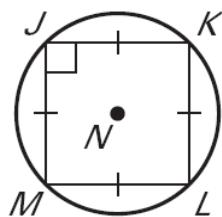
21.



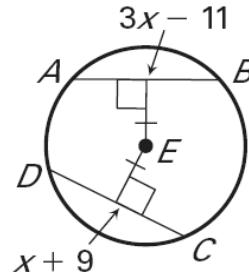
22. $m\widehat{LM}$



23. $m\widehat{KJL}$



24. Find x.



\overline{MQ} and \overline{NR} are diameters. Find the indicated measure.

25. $m\widehat{MN}$

26. $m\widehat{NQ}$

27. $m\widehat{NQR}$

28. $m\widehat{MRP}$

29. $m\widehat{QR}$

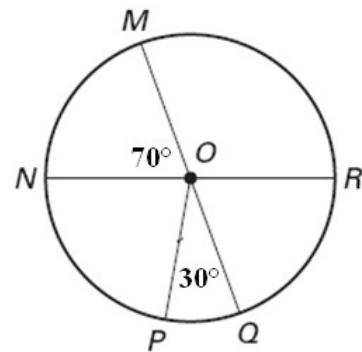
30. $m\widehat{MR}$

31. $m\widehat{QMR}$

32. $m\widehat{PQ}$

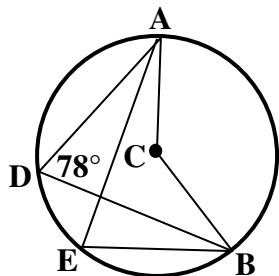
33. $m\widehat{PRN}$

34. $m\widehat{MQN}$

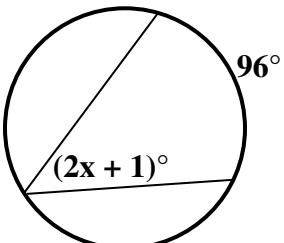


Find the indicated measure.

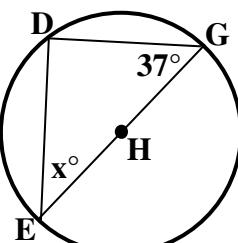
35. $m\angle BEA$



36. Find x .



37. Find x .



Answer Key:

- | | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|--------------------------------|
| 1) $m\angle 1 = 86^\circ$ | 2) $m\angle 1 = 63^\circ$ | 3) $m\angle 1 = 116^\circ$ | 4) $x = 168$ | 5) $m\angle 1 = 65^\circ$ | 6) $m\angle 1 = 148^\circ$ |
| 7) $x = 125$ | 8) $m\angle 1 = 74^\circ$ | 9) $m\angle 1 = 33^\circ$ | 10) $m\angle 1 = 36^\circ$ | 11) $m\angle 1 = 40^\circ$ | 12) $x = 104$ |
| 13) $x = 81$ | 14) $m\angle 1 = 48^\circ$ | 15) $x = 135$ | 16) Yes | 17) $x = \pm 2$ | 18) $r = 5$ |
| 20) $x = 4$ | 21) $x = 6$ | 22) $m\widehat{LM} = 142^\circ$ | 23) $m\widehat{KLJ} = 270^\circ$ | 24) $x = 10$ | 25) $m\widehat{MN} = 70^\circ$ |
| 26) $m\widehat{NQ} = 110^\circ$ | 27) $m\widehat{NQR} = 180^\circ$ | 28) $m\widehat{MRP} = 210^\circ$ | 29) $m\widehat{QR} = 70^\circ$ | 30) $m\widehat{MR} = 110^\circ$ | |
| 31) $m\widehat{QMR} = 290^\circ$ | 32) $m\widehat{PQ} = 30^\circ$ | 33) $m\widehat{PRN} = 280^\circ$ | 34) $m\widehat{MQN} = 290^\circ$ | 35) $m\angle BEA = 78^\circ$ | |
| 36) $x = 23.5$ | 37) $x = 53$ | | | | |