

Inscribed Angles

Inscribed angles have their vertex on the inside edge of a circle. To find the measure of the minor arc (small part of the circle's curve that sits between the ends of the angle segments), multiply the inscribed angle by two (to go from arc to angle, divide by two).

Central Angles

Inscribed angles have their vertex at the center of a circle. The measure of a central angle is equal to the measure of the minor arc (small part of the circle's curve that sits between the ends of the angle segments).

Determine the measure of the minor arc, the major arc, and the angle.

1.
 $\widehat{BAD} = 360 - \widehat{BD}$ $\widehat{BD} = 126^\circ$
 $\widehat{BAD} =$

2.
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 $\widehat{BAD} =$

3.

4.

5.

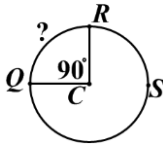
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7.

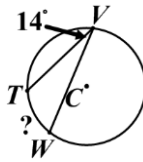
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9.

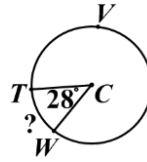
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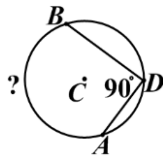
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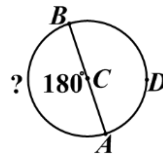
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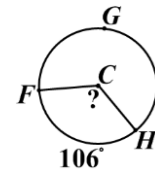
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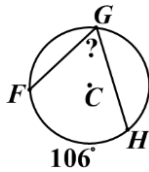
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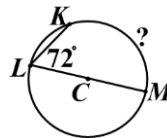
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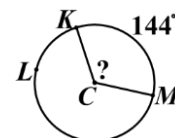
16.



17.



18.



Angles within Circles Answers

1. $\widehat{BAD} = 234^\circ$, $\widehat{BD} = 126^\circ$ & $m\angle A = 63^\circ$	2. $\widehat{BAD} = 234^\circ$, $\widehat{BD} = 126^\circ$ & $m\angle C = 126^\circ$	3. $\widehat{EFG} = 260^\circ$, $\widehat{EG} = 100^\circ$ & $m\angle C = 100^\circ$
4. $\widehat{EFG} = 260^\circ$, $\widehat{EG} = 100^\circ$ & $m\angle F = 50^\circ$	5. $\widehat{HKL} = 318^\circ$, $\widehat{HL} = 42^\circ$ & $m\angle C = 42^\circ$	6. $\widehat{HKL} = 318^\circ$, $\widehat{HL} = 42^\circ$ & $m\angle K = 21^\circ$
7. $\widehat{MPN} = 190^\circ$, $\widehat{MN} = 170^\circ$ & $m\angle C = 170^\circ$	8. $\widehat{MPN} = 190^\circ$, $\widehat{MN} = 170^\circ$ & $m\angle P = 85^\circ$	9. $\widehat{QSR} = 270^\circ$, $\widehat{QR} = 90^\circ$ & $m\angle S = 45^\circ$
10. $\widehat{QSR} = 270^\circ$, $\widehat{QR} = 90^\circ$ & $m\angle C = 90^\circ$	11. $\widehat{TVW} = 332^\circ$, $\widehat{TW} = 28^\circ$ & $m\angle V = 14^\circ$	12. $\widehat{TVW} = 332^\circ$, $\widehat{TW} = 28^\circ$ & $m\angle C = 28^\circ$
13. $\widehat{BDA} = 180^\circ$, $\widehat{AB} = 180^\circ$ & $m\angle D = 90^\circ$	14. $\widehat{BDA} = 180^\circ$, $\widehat{AB} = 180^\circ$ & $m\angle C = 180^\circ$	15. $\widehat{FGH} = 254^\circ$, $\widehat{FH} = 106^\circ$ & $m\angle C = 106^\circ$
16. $\widehat{FGH} = 254^\circ$, $\widehat{FH} = 106^\circ$ & $m\angle G = 53^\circ$	17. $\widehat{KLM} = 216^\circ$, $\widehat{KM} = 144^\circ$ & $m\angle L = 72^\circ$	18. $\widehat{KLM} = 216^\circ$, $\widehat{KM} = 144^\circ$ & $m\angle C = 144^\circ$