

9.4 Chords in Circles

Answers

1. $\overline{AC} \cong \overline{DF}$
2. $\overline{AC} \cong \overline{DF}$
3. $\overline{DJ} \cong \overline{JF}$
4. $\overline{DE} \cong \overline{EJ}$
5. $\angle AGH \cong \angle HGC$
6. $\angle DGF \cong \angle AGC$
7. **Possible Answers** $\overline{AG}, \overline{HG}, \overline{CG}, \overline{FG}, \overline{JG}, \overline{DG}$
8. 107°
9. 8°
10. 118°
11. 133°
12. 140°
13. 120°
14. $x = 64^\circ, y = 4$
15. $x = 8, y = 10$
16. $x \approx 15.3, y \approx 12.3$
17. $x \approx 18.36$
18. $x = 9^\circ, y = 6$
19. $x = 4.5$
20. $x = 3$
21. $x = 7$
22. $x \approx 6.63$
23. 121.3°

24. 112.9°
25. $\overline{BF} \cong \overline{FD}$ and $\overline{BF} \cong \overline{FD}$ by Chord Theorem #3.
26. $\overline{CA} \cong \overline{AF}$ by Chord Theorem #4.
27. \overline{QS} is a diameter by Chord Theorem #2.