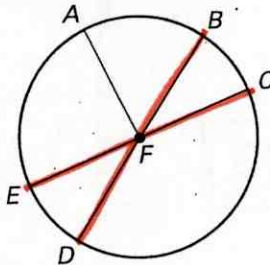


LESSON 10.2 Practice
For use with pages 659-663

In $\odot F$, determine whether the given arc is a *minor arc*, *major arc*, or *semicircle*.



1. \widehat{AB}
minor

2. \widehat{AE}
minor

3. \widehat{EAC}
semicircle

4. \widehat{ACD}
major

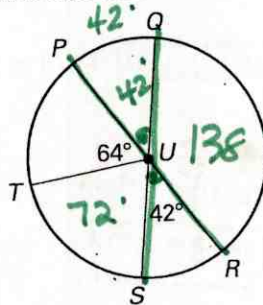
5. \widehat{CAD}
major

6. \widehat{DEB}
semicircle

7. \widehat{BAE}
minor

8. \widehat{DEC}
major

In the figure, \overline{PR} and \overline{QS} are diameters of $\odot U$. Find the measure of the indicated arc.



9. $m\widehat{PQ}$
42°
VA

10. $m\widehat{ST}$
 $180 - (42 + 64)$
 $= 72$

11. $m\widehat{TPS}$
 $360 - 72$
 $= 288$

12. $m\widehat{RT}$
 $= 114$

13. $m\widehat{RQS}$
 $360 - 42$
 318

14. $m\widehat{QR}$
 138

15. $m\widehat{PQS}$
 $360 - (64 + 72)$
 224

16. $m\widehat{TQR}$
 246

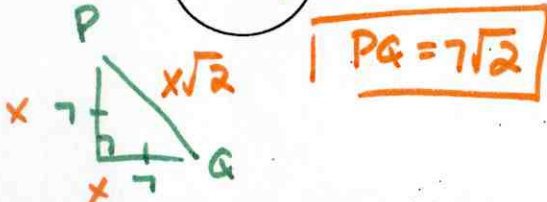
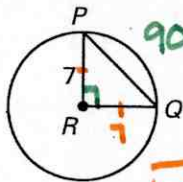
17. $m\widehat{PS}$
 138

18. $m\widehat{PTR}$
 180

LESSON 10.2 Practice *continued*
For use with pages 659-663

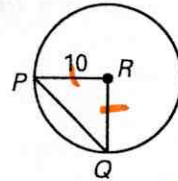
\widehat{PQ} has a measure of 90° in $\odot R$. Find the length of \overline{PQ} .

19.



$PQ = 7\sqrt{2}$

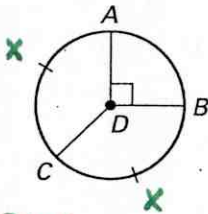
20.



$PQ = 10\sqrt{2}$

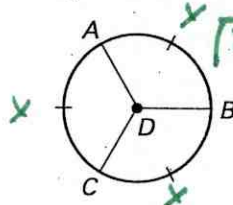
Find the indicated arc measure.

21. $m\widehat{AC} = 135^\circ$



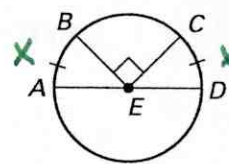
$2x + 90 = 360$
 $2x = 270$
 $x = 135$

22. $m\widehat{ACB} = 2(120)$



$3x = 360$
 $x = 120$

23. $m\widehat{DAB} = 180 + 45$



$2x + 90 = 180$
 $2x = 90$
 $x = 45$

Two diameters of $\odot T$ are \overline{PQ} and \overline{RS} . Find the given arc measure if $m\widehat{PR} = 35^\circ$.

24. $m\widehat{PS} = 180 - 35$
 $m\widehat{PS} = 145^\circ$

25. $m\widehat{PSR} = 145 + 180$
 $= 325^\circ$

26. $m\widehat{PRQ} = 180^\circ$

27. $m\widehat{PRS} = 35 + 180$
 $= 215^\circ$

Two diameters of $\odot N$ are \overline{JK} and \overline{LM} . Find the given arc measure if $m\widehat{JM} = 165^\circ$.

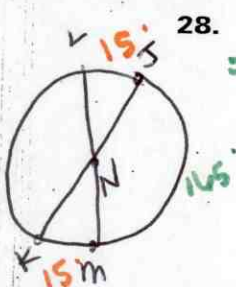
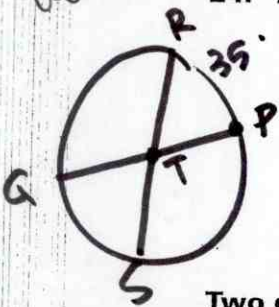
28. $m\widehat{JL} = 180 - 165$
 $= 15^\circ$

29. $m\widehat{JMK} = 180^\circ$

30. $m\widehat{JLM} = 360 - 165$
 $= 195^\circ$

31. $m\widehat{KLM} = 360 - 15 = 345^\circ$

* Draw diagram

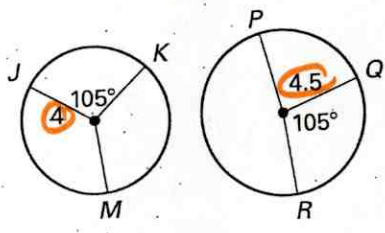


LESSON 10.2 Practice *continued*
For use with pages 659-663

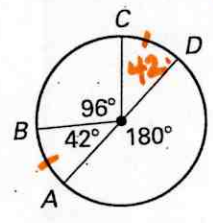
same radius and measure

Tell whether the given arcs are congruent.

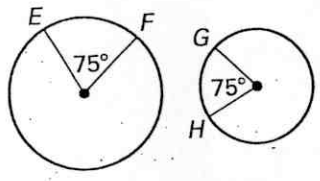
32. \widehat{JK} and \widehat{QR} **NO**



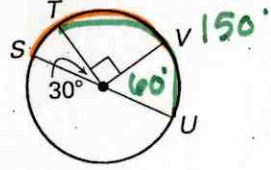
33. \widehat{AB} and \widehat{CD} **yes**



34. \widehat{EF} and \widehat{GH} **NO, don't know radius**

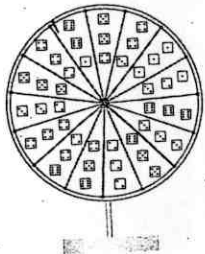


35. \widehat{STV} and \widehat{UVT} **NO**

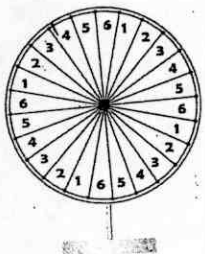


Game Shows Each game show wheel shown is divided into congruent sections. Find the measure of each arc.

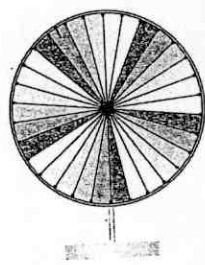
36.



37.



38.



In Exercises 39 and 40, use the following information.

Sprinkler A water sprinkler covers the area shown in the figure. It moves through the covered area at a rate of about 5° per second.

39. What is the measure of the arc covered by the sprinkler?

40. If the sprinkler starts at the far left position, how long will it take for the sprinkler to reach the far right position?

