

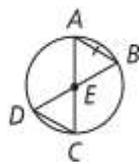
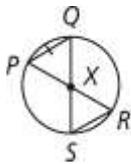
12-2 Practice

Chords and Arcs

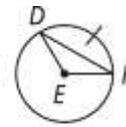
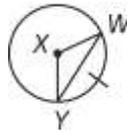
Form G

In Exercises 1 and 2, the $\odot X \cong \odot E$. What can you conclude?

1.

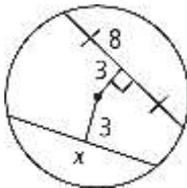


2.

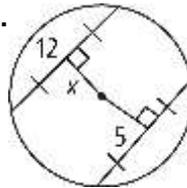


Find the value of x .

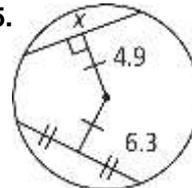
3.



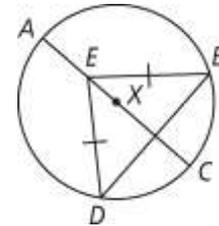
4.



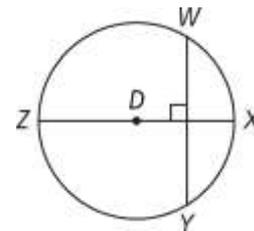
5.



6. In $\odot X$, \overline{AC} is a diameter and $\overline{ED} \cong \overline{EB}$. What can you conclude about \widehat{DC} and \widehat{CB} ? Explain.

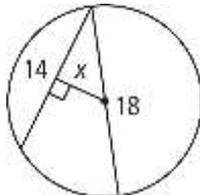


7. In $\odot D$, \overline{ZX} is the diameter of the circle and $\overline{ZX} \perp \overline{WY}$. What conclusions can you make? Justify your answer.

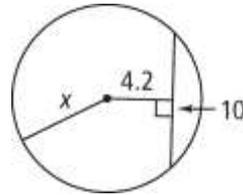


Find the value of x to the nearest tenth.

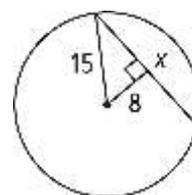
8.



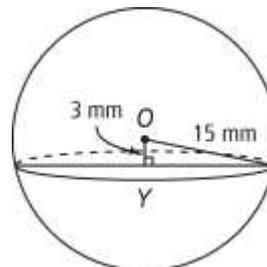
9.



10.



11. In the figure at the right, sphere O with radius 15 mm is intersected by a plane 3 mm from the center. To the nearest tenth, find the radius of the cross section $\odot Y$.

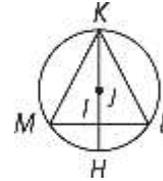


12-2 Practice (continued)

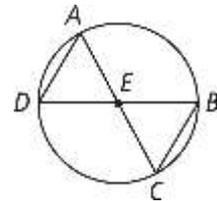
Chords and Arcs

Form G

- 12. Given:** $\odot J$ with diameter \overline{HK} ; $\widehat{KL} \cong \widehat{LM} \cong \widehat{MK}$
Prove: $\triangle KIL \cong \triangle KIM$

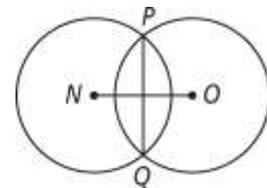


- 13. Given:** \overline{AC} and \overline{DB} are diameters of $\odot E$.
Prove: $\triangle EAD \cong \triangle ECB$



$\odot N$ and $\odot O$ are congruent. \overline{PQ} is a chord of both circles.

- 14.** If $NO = 12$ in. and $\overline{PQ} = 8$ in., how long is the radius to the nearest tenth of an inch?



- 15.** If $NO = 30$ mm and radius = 16 mm, how long is \overline{PQ} to the nearest tenth of a millimeter?

- 16.** If radius = 12 m and $\overline{PQ} = 9$ m, how long is \overline{NO} to the nearest tenth?

- 18.** Two concentric circles have radii of 6 mm and 12 mm. A segment tangent to the smaller circle is a chord of the larger circle. What is the length of the segment to the nearest tenth.