



10-6 Solve It!



SOLVE IT!

Getting Ready!

The bicycle wheel shown at the right travels 63 in. in one complete rotation. If the wheel rotates only 120° about the center, how far does it travel? Justify your reasoning.

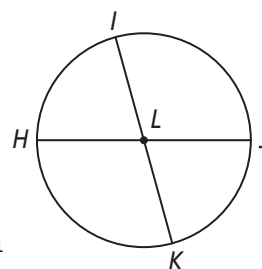


Whoa—that wheel has to complete over a thousand rotations to go one mile.

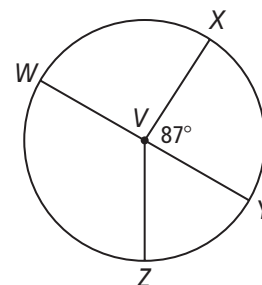
10-6 Lesson Quiz

1. Use the circle at the right for Questions 1–3.

- a. What are the minor arcs of $\odot L$?
- b. What are the semicircles of $\odot L$?
- c. What are the major arcs of $\odot L$ that contain point K ?



2. Do you UNDERSTAND? What is the measure of arc WX in $\odot V$?



3. The radius of $\odot C$ is four times the radius of $\odot D$. How many times greater is the circumference of $\odot C$ than $\odot D$?

Answers

Solve It!

21 in.; explanations may vary.
Sample: 120° is one third of a complete revolution, so the wheel will travel $\frac{1}{3} \cdot 63 = 21$ in. for a rotation of 120° .

Lesson Quiz

1. a. arcs HI , IJ , JK , and KH
- b. arcs HIJ , IJK , JKH , and KHI
- c. arcs KHJ , HIK , IJH , and JKI

2. 93°

3. four times