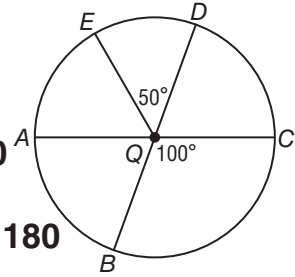


10-2 Practice

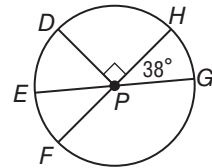
Measuring Angles and Arcs

\overline{AC} and \overline{DB} are diameters of $\odot Q$. Identify each arc as a *major arc*, *minor arc*, or *semicircle* of the circle. Then find its measure.



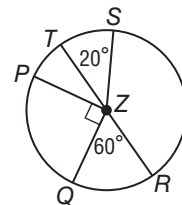
1. $m\widehat{AE}$ minor arc; 50
2. $m\widehat{AB}$ minor arc; 80
3. $m\widehat{EDC}$ minor arc; 130
4. $m\widehat{ADC}$ semicircle; 180
5. $m\widehat{ABC}$ semicircle; 180
6. $m\widehat{BC}$ minor arc; 100

\overline{FH} and \overline{EG} are diameters of $\odot P$. Find each measure.



7. $m\widehat{EF}$ 38
8. $m\widehat{DE}$ 52
9. $m\widehat{FG}$ 142
10. $m\widehat{DHG}$ 128
11. $m\widehat{DFG}$ 232
12. $m\widehat{DGE}$ 308

Use $\odot Z$ to find each arc length. Round to the nearest hundredth.



13. \widehat{QPT} , if $QZ = 10$ inches
20.94 in.
14. \widehat{QR} , if $PZ = 12$ feet
12.57 ft
15. \widehat{PQR} , if $TR = 15$ meters
19.63 m
16. \widehat{QPS} , if $ZQ = 7$ centimeters
17.10 cm

17. HOMEWORK Refer to the table, which shows the number of hours students at Leland High School say they spend on homework each night.

Homework	
Less than 1 hour	8%
1–2 hours	29%
2–3 hours	58%
3–4 hours	3%
Over 4 hours	2%

- a. If you were to construct a circle graph of the data, how many degrees would be allotted to each category?
28.8, 104.4, 208.8, 10.8, 7.2

b. Describe the arcs associated with each category.

The arc associated with 2–3 hours is a major arc; minor arcs are associated with the remaining categories.