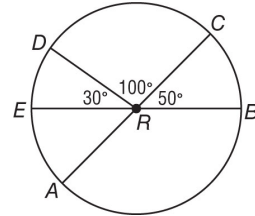


## 10.2 Measuring Angles and Arcs

### Part 1

$\overline{AC}$  and  $\overline{EB}$  are diameters of  $\odot R$ . (a) Identify each arc as a major arc, minor arc, or semicircle of the circle. (b) Then find its measure.



1.  $m\widehat{EA}$

2.  $m\widehat{CB}$

3.  $m\widehat{DC}$

4.  $m\widehat{DEB}$

5.  $m\widehat{AB}$

6.  $m\widehat{CDA}$

### Part 2

$\overline{PR}$  and  $\overline{QT}$  are diameters of  $\odot A$ . Find each measure.

7.  $m\widehat{UPQ}$

8.  $m\widehat{PQR}$

9.  $m\widehat{UTS}$

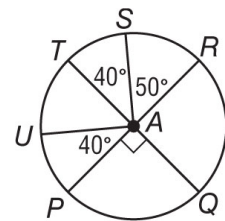
10.  $m\widehat{RS}$

11.  $m\widehat{RSU}$

12.  $m\widehat{STP}$

13.  $m\widehat{PQS}$

14.  $m\widehat{PRU}$

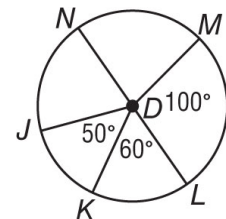


### Part 3

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

15.  $\widehat{LM}$  if the radius is 5 inches

16.  $\widehat{MN}$  if the diameter is 3 yards



17.  $\widehat{KL}$  if  $JD = 7$  centimeters

18.  $\widehat{NJK}$  if  $NL = 12$  feet