

Name \_\_\_\_\_ Date \_\_\_\_\_

**Day 1 – Circle Vocabulary and Central Angles**

1. Identify and name each of the following from  $\odot O$ . Be sure to use the correct notation. BD is a diameter.

$\angle AOB$  a. Two different central angles

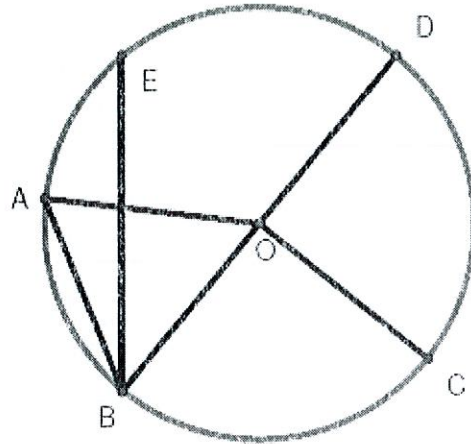
$\angle COD$   
 $\widehat{DC}$  b. A minor arc

$\widehat{ACD}$  c. A major arc

$\widehat{BCD}$  d. A semicircle

$\overline{BE}$   
 $\overline{AB}$  e. Two different chords

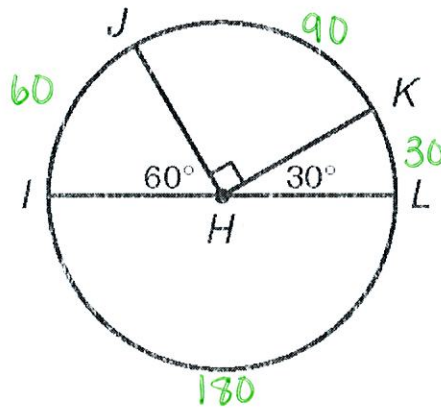
$\angle AOD$  f. The central angle subtended by  $\widehat{AD}$



Find each measure.

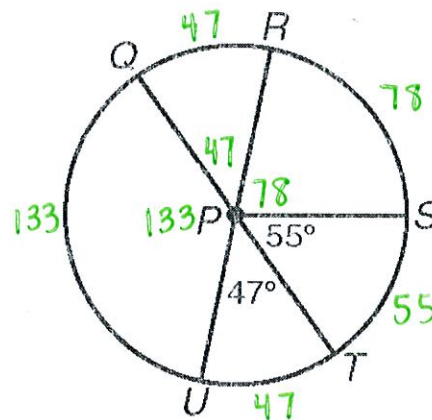
IL is a diameter.

2.  $m\widehat{LK} = 30^\circ$ ,  $m\widehat{IK} = 150^\circ$   
 $90 + 60 = 150$



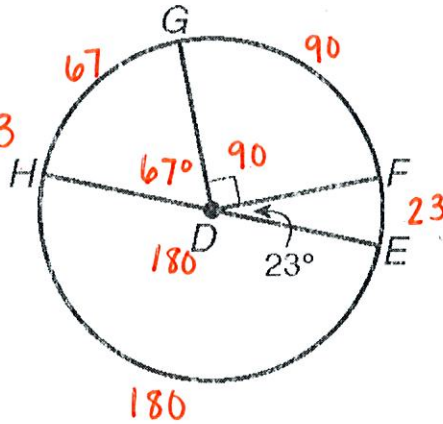
RU & QT are diameters.

3.  $m\widehat{QS} = 125^\circ$ ,  $m\widehat{RQT} = 227^\circ$   
 $47 + 78 = 125$       $47 + 133 + 47 = 227$



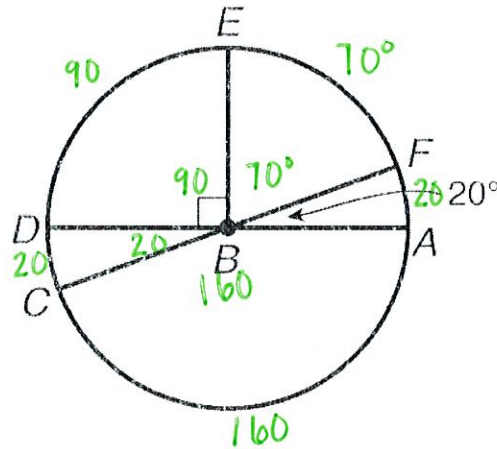
HE is a diameter

4.  $m\widehat{HG} = 67^\circ$ ,  $m\widehat{FEH} = 203^\circ$   
 $180 + 23 = 203$

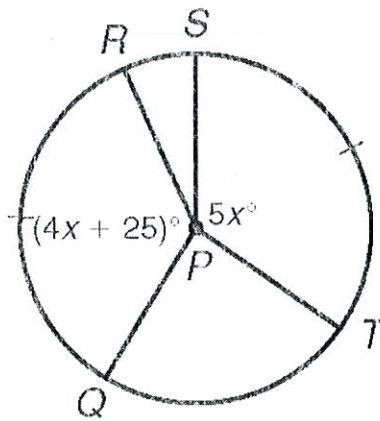


DA and FC are diameters.

5.  $m\widehat{EF} = 70^\circ$ ,  $m\widehat{CEA} = 200^\circ$   
 $20 + 90 + 70 + 20$



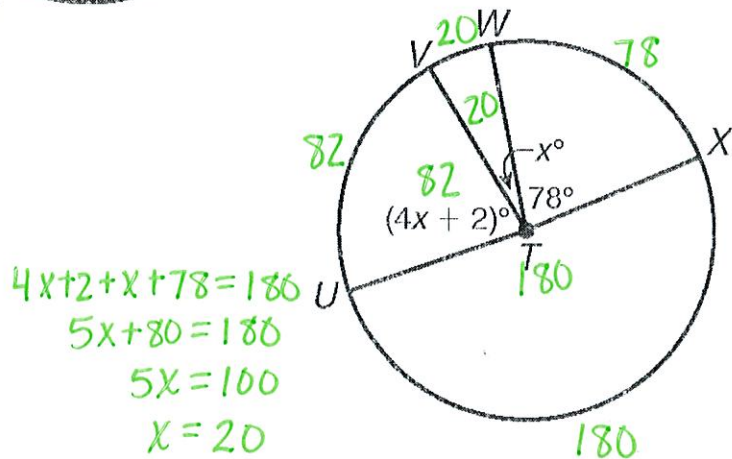
6.  $\angle QPR = 125^\circ$



$$\begin{aligned} 4x + 25 &= 5x \\ 25 &= x \\ x &= 25 \end{aligned} \quad \left| \quad \begin{aligned} m\angle QPR &= 4x + 25 \\ &= 4(25) + 25 \\ &= 100 + 25 \\ m\angle QPR &= 125^\circ \end{aligned}$$

UX is a diameter.

7.  $\angle UTW = 102^\circ$ ,  $m\widehat{UV} = 82^\circ$   
 $82 + 20 = 102$



$$\begin{aligned} 4x + 2 + x + 78 &= 180 \\ 5x + 80 &= 180 \\ 5x &= 100 \\ x &= 20 \end{aligned}$$