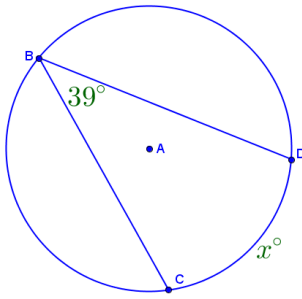


### SM2 9.6: Inscribed and Circumscribed Angles

a) Find the measure of the indicated variable(s). b) Classify the angle listed.

1)

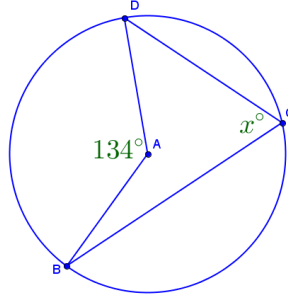


$x = 78^\circ$

Classify  $\angle BDC$ :

Central **Inscribed**  
Circumscribed

2)

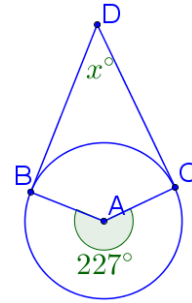


$x = 67^\circ$

Classify  $\angle BAD$ :

**Central** Inscribed  
Circumscribed

3)

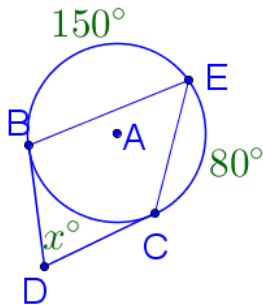


$x = 47^\circ$

Classify  $\angle BDC$ :

Central Inscribed  
**Circumscribed**

4)

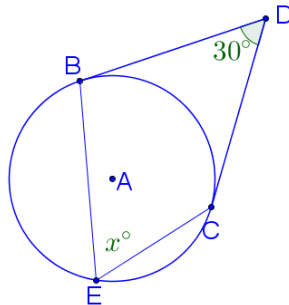


$x = 50^\circ$

Classify  $\angle BDC$ :

Central Inscribed  
**Circumscribed**

5)

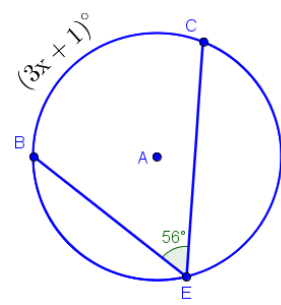


$x = 75^\circ$

Classify  $\angle BEC$ :

Central **Inscribed**  
Circumscribed

6)

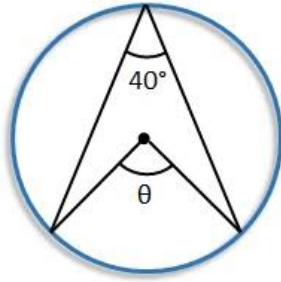


$x = 37^\circ$

Classify  $\angle BEC$ :

Central **Inscribed**  
Circumscribed

7)

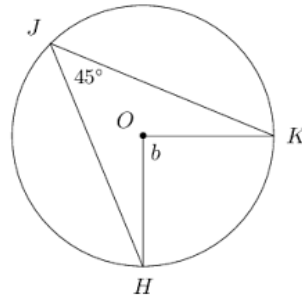


$\theta = 80^\circ$

Classify  $\angle\theta$ :

Central                  Inscribed  
Circumscribed

8)

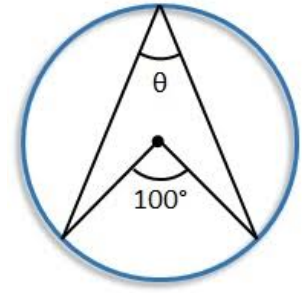


$b = 90^\circ$

Classify  $\angle HOK$ :

Central                  Inscribed  
Circumscribed

9)

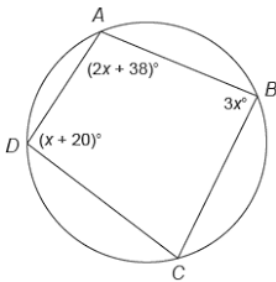


$\theta = 50^\circ$

Classify  $\angle\theta$ :

Central                  Inscribed  
Circumscribed

10)

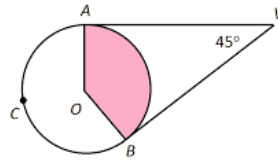


$x = 40^\circ$

Classify  $\angle DCB$ :

Central                  Inscribed  
Circumscribed

11)



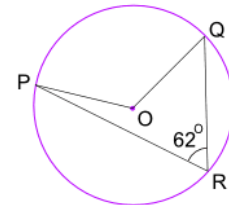
Find the shaded Area of the Sector, given  $r = 4m$ :

$A.S. = \pi(4^2) \left(\frac{135}{360}\right) = 6\pi$   
 $\approx 18.850 m^2$

Classify  $\angle AVB$ :

Central                  Inscribed  
Circumscribed

12)

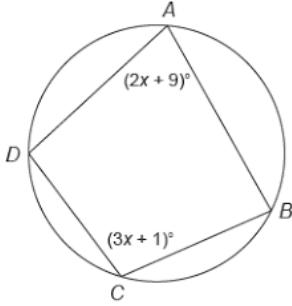


$m\angle POQ = 124^\circ$

Classify  $\angle POQ$ :

Central                  Inscribed  
Circumscribed

13)

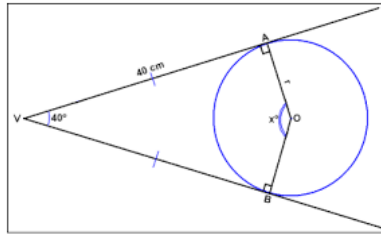


$x = 34^\circ$

Classify  $\angle BAD$ :

Central **Inscribed**  
Circumscribed

14)

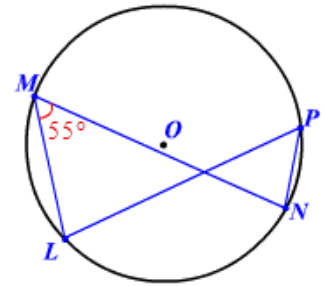


$x = 140^\circ$

Classify  $\angle AVB$ :

Central **Inscribed**  
**Circumscribed**

15)

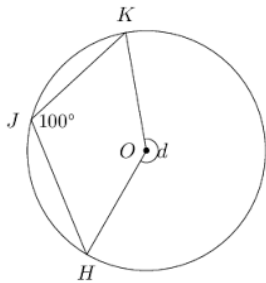


$m\angle LPN = 55^\circ$

Classify  $\angle MNP$ :

Central **Inscribed**  
Circumscribed

16)

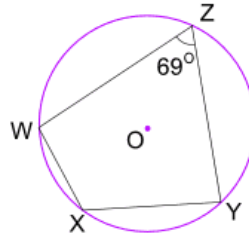


$d = 200^\circ$

Classify  $\angle KJH$ :

Central **Inscribed**  
Circumscribed

17)

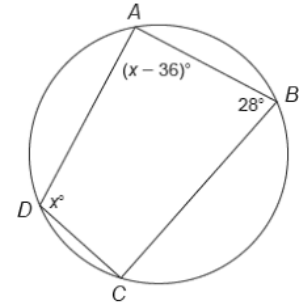


$m\angle WXY = 111^\circ$

Classify  $\angle WXY$ :

Central **Inscribed**  
Circumscribed

18)



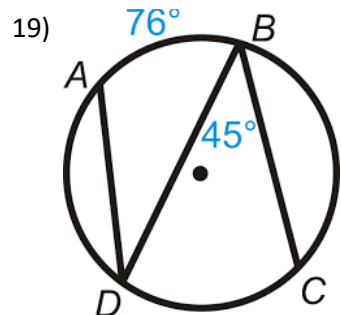
$x = 152^\circ$

$m\angle DAB = 116^\circ$

$m\angle DCB = 64^\circ$

Classify  $\angle BAD$ :

Central **Inscribed**  
Circumscribed



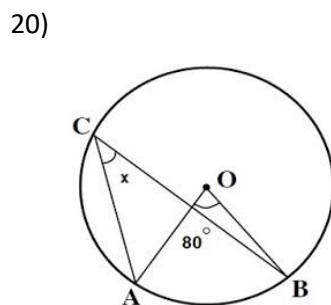
$$m\angle ADB = 38^\circ$$

$$m\widehat{DC} = 90^\circ$$

Classify  $\angle DBC$ :

Central            **Inscribed**

Circumscribed



$$x = 40^\circ$$

Classify  $\angle ACB$ :

Central            **Inscribed**

Circumscribed