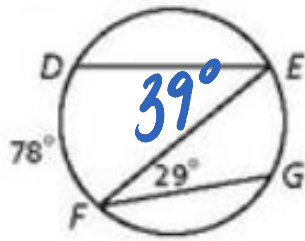


# Angle = $\frac{1}{2}$ Arc

Find each measure.

2.  $m\angle DEF$

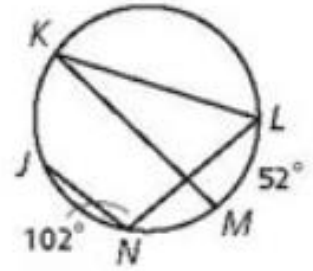
3.  $m\widehat{EG}$



$\angle DEF = 39^\circ$   
 $\widehat{EG} = 58^\circ$

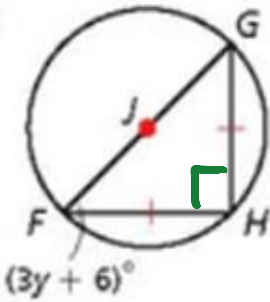
4.  $m\widehat{JKL}$

5.  $m\angle LKM$



$\widehat{JKL} = 204^\circ$   
 $\angle LKM = 26^\circ$

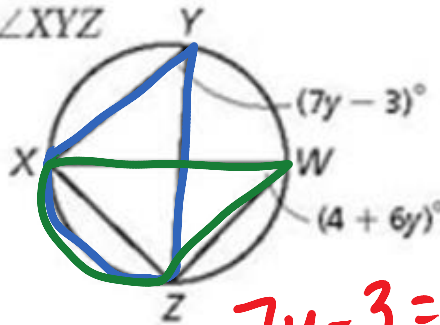
8.  $y$



$3y + 6 = 45$   
 $3y = 39$

$y = 13$

9.  $m\angle XYZ$

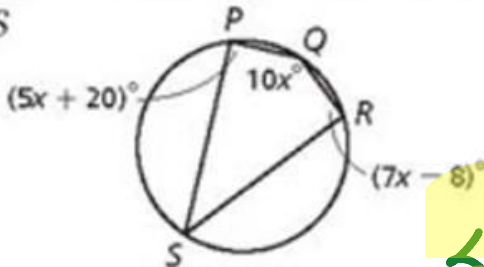


$7y - 3 = 4 + 6y$   
 $y = 7$

$m\angle XYZ = 46^\circ$

**Multi-Step** Find the angle measures of each quadrilateral.

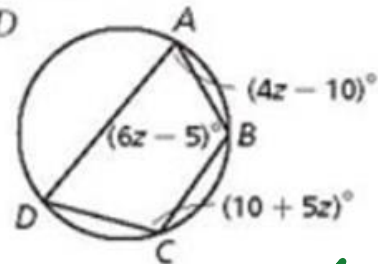
10. PQRS



$5x + 20 + 7x - 8 = 180$   
 $12x + 12 = 180$   
 $12x = 168$   
 $x = 14$

$\angle P = 90^\circ$   
 $\angle Q = 140^\circ$   
 $\angle R = 90^\circ$   
 $\angle S = 40^\circ$

11. ABCD



$4z - 10 + 10 + 5z = 180$   
 $9z = 180$   
 $z = 20$

$\angle A = 70^\circ$   
 $\angle B = 115^\circ$   
 $\angle C = 110^\circ$   
 $\angle D = 65^\circ$