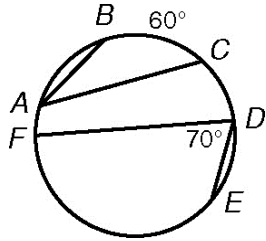


Find each measure.

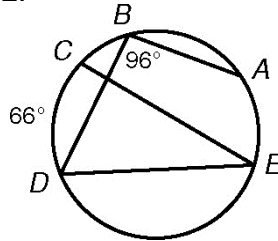
1.



$m\angle BAC =$ _____

$m\widehat{EF} =$ _____

2.

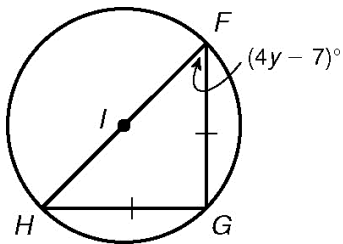


$m\angle CED =$ _____

$m\widehat{AED} =$ _____

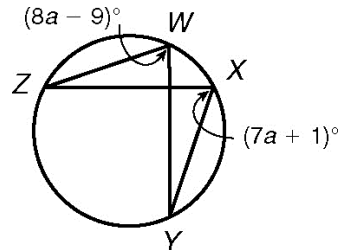
Find each value.

3. $m\angle F =$ _____



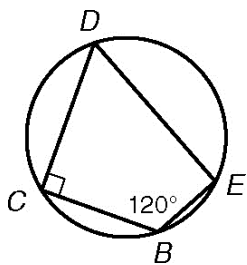
4. $m\angle X =$ _____

$m\widehat{ZY} =$ _____



Find the angle measures or arc measures.

5.



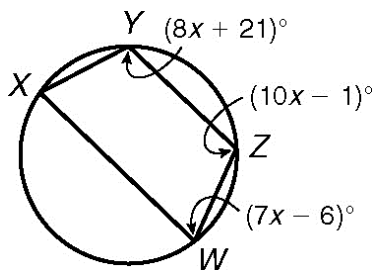
$m\widehat{CDE} =$ _____

$m\widehat{BED} =$ _____

$m\angle D =$ _____

$m\angle E =$ _____

6.



$m\angle W =$ _____

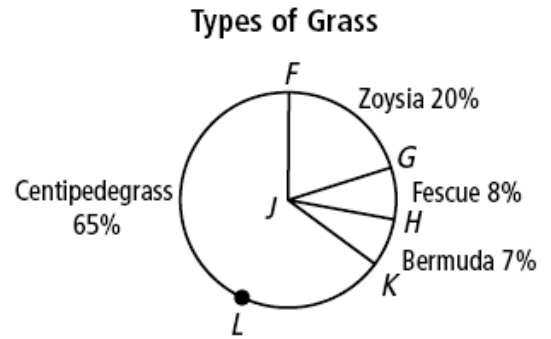
$m\angle X =$ _____

$m\angle Y =$ _____

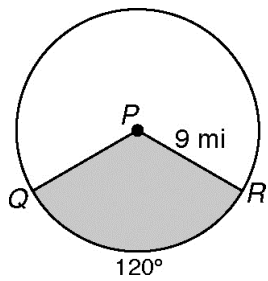
$m\angle Z =$ _____

7. The circle graph shows types of grass planted in neighborhood yards.

Find $m\widehat{KLF}$.



8. Round both answers to the nearest tenth.



Area of sector $QPR =$ _____ Length of $\widehat{QR} =$ _____

9. Find the area of the shaded region to the nearest tenth.

