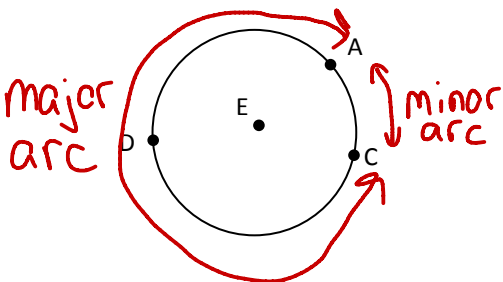


1. What is the difference between a major and minor arc? Explain using the picture and a few sentences.



The minor arc is less than 180° and is \widehat{AC} in the picture
 The major arc is greater than 180° and is \widehat{ADC} in the picture.

Given circle A, find the measures of the arcs. Are the arcs congruent?

2. $m\widehat{BC}$ and $m\widehat{EF}$

$m\widehat{BC} = 58^\circ$
 $m\widehat{EF} = 58^\circ$

Congruent

4. $m\widehat{BCD}$ and $m\widehat{DEF}$

$m\widehat{BCD} = 130^\circ$
 $m\widehat{DEF} = 130^\circ$
 Congruent

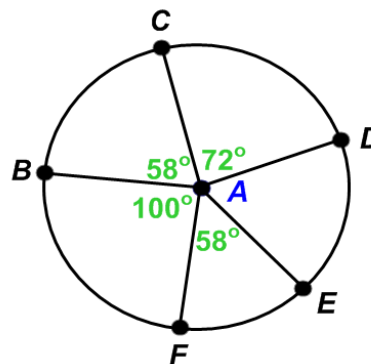
3. $m\widehat{CD}$ and $m\widehat{DE}$

$m\widehat{CD} = 72^\circ$
 $m\widehat{DE} = 72^\circ$

Congruent

5. $m\widehat{BFE}$ and $m\widehat{CBF}$

$m\widehat{BFE} = 158^\circ$
 $m\widehat{CBF} = 158^\circ$
 Congruent



$\angle A = 360^\circ - 58^\circ - 72^\circ - 58^\circ - 100^\circ$

Find the measure of each arc in circle O. $m\angle BOA = 44^\circ$

6. $m\widehat{BA}$

44°

7. $m\widehat{BC}$

136°

8. $m\widehat{CD}$

44°

9. $m\widehat{ACB}$

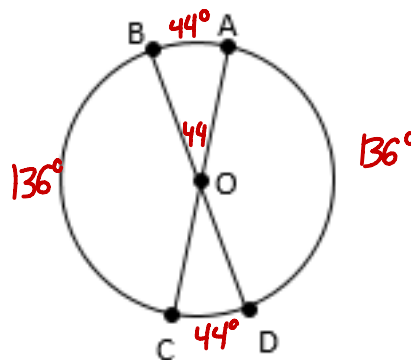
$360 - 44$
 316°

10. $m\widehat{BCD}$

$136 + 44$
 180°

11. $m\widehat{AD}$

136°



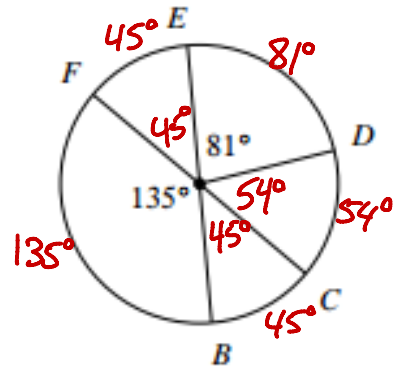
Find the measure of each of the following in the circle to the right.

12. $m\widehat{FD}$
 126°

13. $m\widehat{FCD}$
 234°

14. $m\widehat{FBC}$
 180°

15. $m\widehat{BFC}$
 315°



Use the figure at the right to answer 16 and 17.

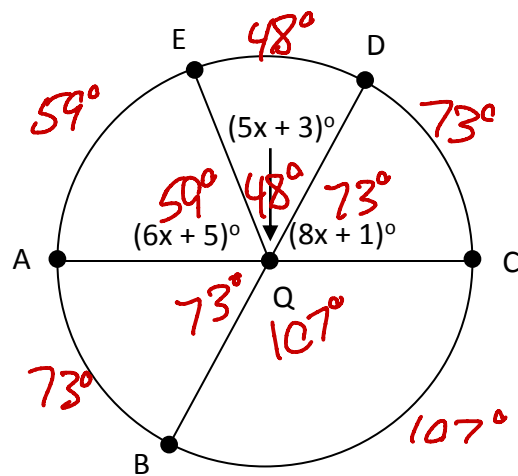
16. Find the value of x.

$$6x + 5 + 5x + 3 + 8x + 1 = 180$$

$$19x + 9 = 180$$

$$19x = 171$$

$$x = 9$$



17. a. Find the $m\widehat{DE}$
 48°

b. Find the $m\widehat{AB}$
 73°

c. Find the $m\widehat{DCB}$
 180°

d. Find the $m\widehat{BDC}$
 73°