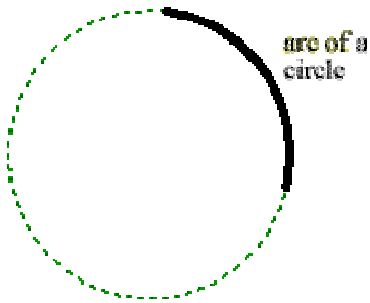


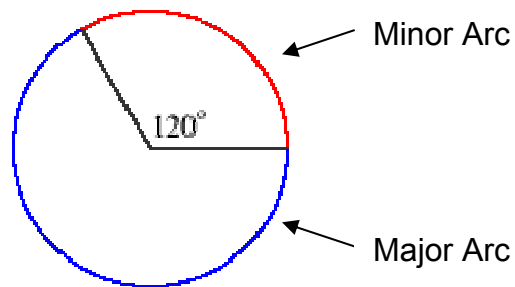
## Angles and Arcs

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### Arc of a Circle



### Types of Arcs



### REMEMBER

- A full circle = 360
- A semicircle = 180
- Minor arc =  $360 - \text{major arc}$
- Major arc =  $360 - \text{minor arc}$
- Vertical angles are equal
- Arc length =  $\text{Circumference} \times \text{angle} / 360$
- Sum of central angles is 360

Q1. Find each measure.

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14.  $m\angle CGB$

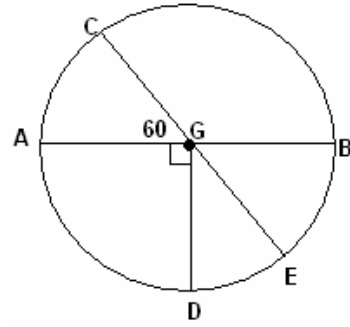
15.  $m\angle BGE$

16.  $m\angle AGD$

17.  $m\angle DGE$

18.  $m\angle CGD$

19.  $m\angle AGE$



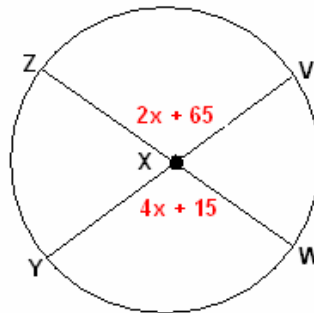
Q2. Find each measure. (*Hint: Find x.*)

20.  $m\angle ZXV$

21.  $m\angle YXW$

22.  $m\angle ZXY$

23.  $m\angle VXW$



Q3. In circle O, EC and AB are diameters and  $\angle BOD \cong \angle DOE \cong \angle EOF \cong \angle FOA$ . Find each measure.

24. m of arc BC

25. m arc AC

26. m arc AE

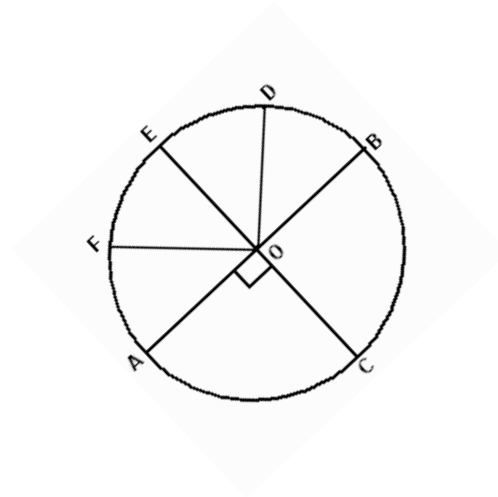
27. m arc EB

28. m arc ACB

29. m arc AD

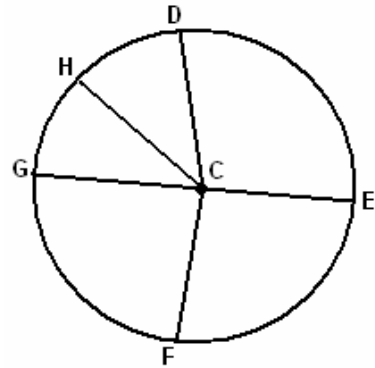
30. m arc CBF

31. m arc ADC



Q4. The diameter of circle C is 32 units long. Find the **length of each arc** for the given angle measure.

40. arc DE if  $m\angle DCE = 100$



41. arc DHE if  $m\angle DCE = 90$

42. arc HDF if  $m\angle HCF = 125$

43. arc HD if  $m\angle DCH = 45$

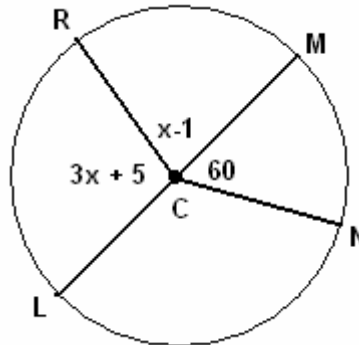
Q5. Find each measure. (*Hint: Find x.*)

4.  $m\angle NCL$

5.  $m\angle RCL$

6.  $m\angle RCM$

7.  $m\angle RCN$



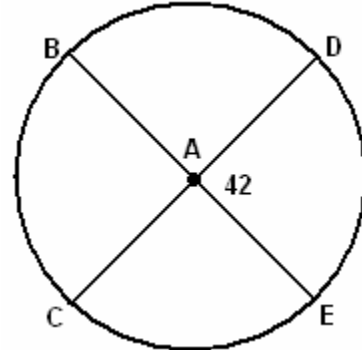
Q6. In circle A,  $m\angle EAD = 42$ . Find each measure.

8.  $m \text{ arc } BC$

9.  $m \text{ arc } CBE$

10.  $m \text{ arc } EDB$

11.  $m \text{ arc } CD$



In circle Z,  $\angle WZX = \angle VZU$ ,  $m\angle VZU = 4x$ ,  $m\angle UZY = 2x + 24$  and VY and WU are diameters. Find each measure.

