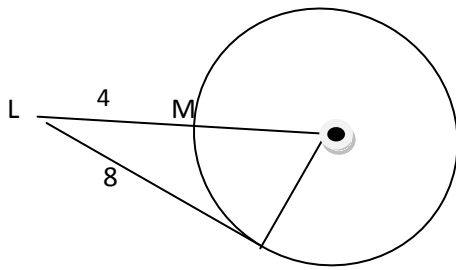
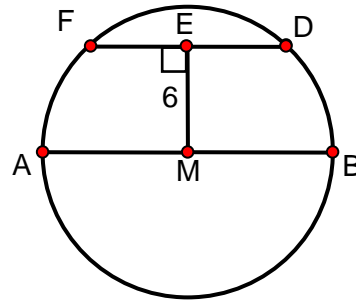


Show all work

1. Find the length of the radius.

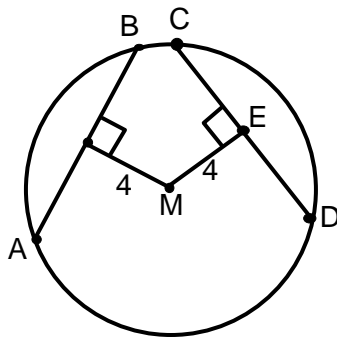


- 2.



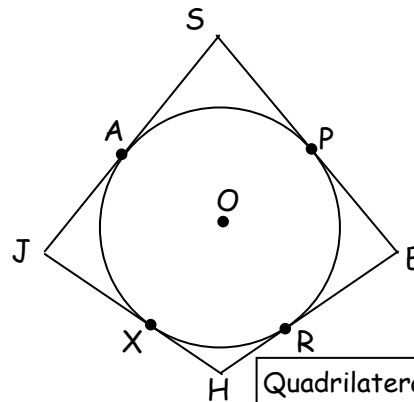
M is the center.  
 AB = 30. Find FD  
 and the  
 measure of  
 angle EMF.

- 3.



M is the center. CE = 8. Find AB.

- 4.



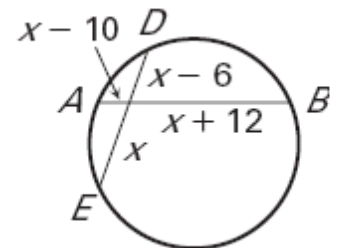
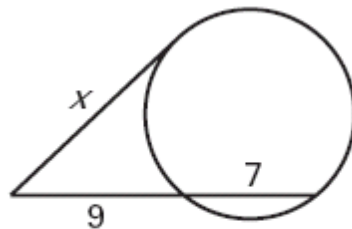
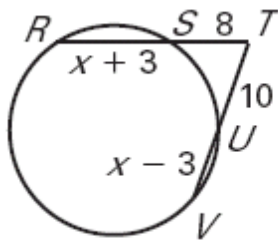
Quadrilateral JSEH is circumscribed  
 about circle P. JS=16,  
 PE=5, HJ=18, HX=9. Find the  
 perimeter of the quadrilateral.

Show formulas and work

5.  $x = \underline{\hspace{2cm}}$

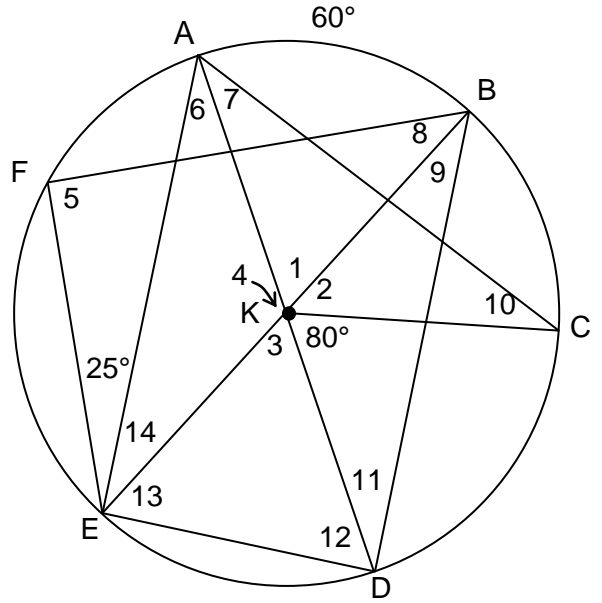
6.  $x = \underline{\hspace{2cm}}$

7.  $x = \underline{\hspace{2cm}}$



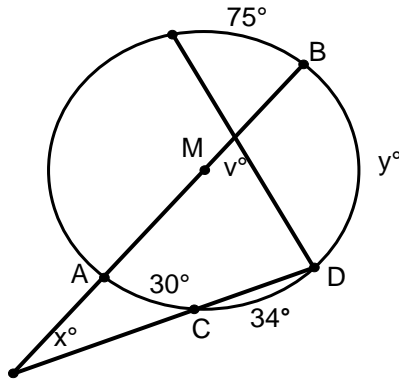
8. K is the center of the circle. Find the measure of each arc or angle.

- |                                               |                                            |
|-----------------------------------------------|--------------------------------------------|
| a) $m\widehat{BC} = \underline{\hspace{2cm}}$ | j) $m\angle 5 = \underline{\hspace{2cm}}$  |
| b) $m\widehat{CD} = \underline{\hspace{2cm}}$ | k) $m\angle 6 = \underline{\hspace{2cm}}$  |
| c) $m\widehat{DE} = \underline{\hspace{2cm}}$ | l) $m\angle 7 = \underline{\hspace{2cm}}$  |
| d) $m\widehat{EF} = \underline{\hspace{2cm}}$ | m) $m\angle 8 = \underline{\hspace{2cm}}$  |
| e) $m\widehat{FA} = \underline{\hspace{2cm}}$ | n) $m\angle 9 = \underline{\hspace{2cm}}$  |
| f) $m\angle 1 = \underline{\hspace{2cm}}$     | o) $m\angle 10 = \underline{\hspace{2cm}}$ |
| g) $m\angle 2 = \underline{\hspace{2cm}}$     | p) $m\angle 11 = \underline{\hspace{2cm}}$ |
| h) $m\angle 3 = \underline{\hspace{2cm}}$     | q) $m\angle 12 = \underline{\hspace{2cm}}$ |
| i) $m\angle 4 = \underline{\hspace{2cm}}$     | r) $m\angle 13 = \underline{\hspace{2cm}}$ |
|                                               | s) $m\angle 14 = \underline{\hspace{2cm}}$ |

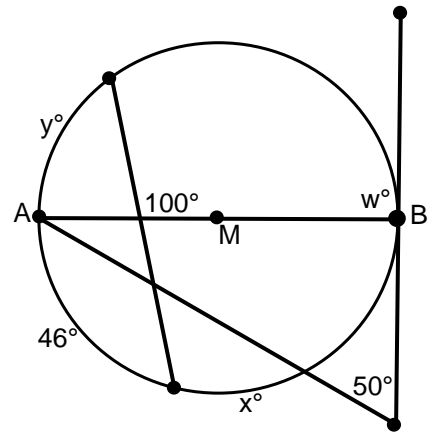


Find the missing variables..

9.  $x = \underline{\hspace{2cm}}$   
 $v = \underline{\hspace{2cm}}$   
 $y = \underline{\hspace{2cm}}$



10.  $w = \underline{\hspace{2cm}}$   
 $x = \underline{\hspace{2cm}}$   
 $y = \underline{\hspace{2cm}}$



11.  $v = \underline{\hspace{2cm}}$   
 $x = \underline{\hspace{2cm}}$   
 $y = \underline{\hspace{2cm}}$

