

10.1

NAME _____

DATE _____

Key

Practice

For use with pages 595–602

HW

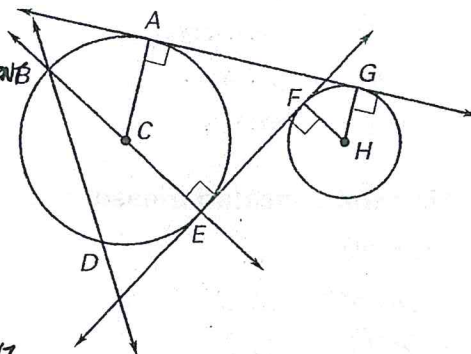
* 1-8 together in class

Q-11,

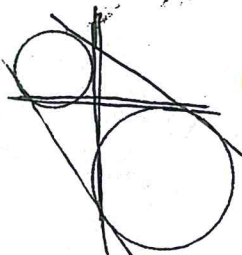
13-18

Name the term that best describes the notation.

1. F POINT OF TANGENCY
2. $\overleftrightarrow{FE}$ COMMON INTERNAL TANGENT
3. $\overline{HG}$ RADIUS
4. $\overline{DB}$ CHORD
5. C CENTER
6. $\overline{BE}$ DIAMETER
7. $\overleftrightarrow{DB}$ SECANT
8. $\overleftrightarrow{AG}$ COMMON EXTERNAL TANGENT

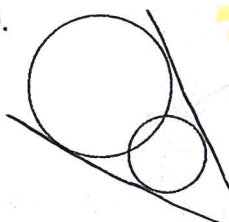


Copy the diagram. Tell how many common tangents the circles have. Then sketch the tangents.



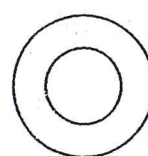
4

10.



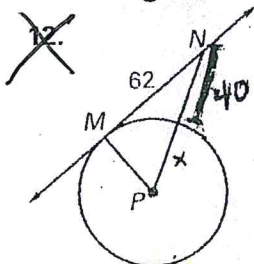
2

11.

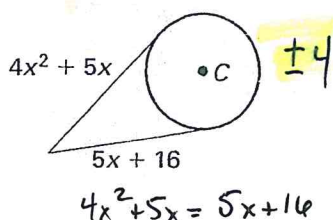


0

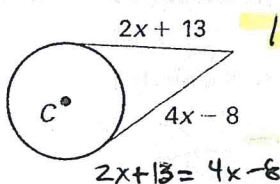
For each $\odot C$ find the value of x . Assume that segments that appear to be tangent are tangent.



15.

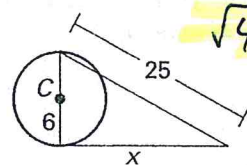
 ± 4

13.



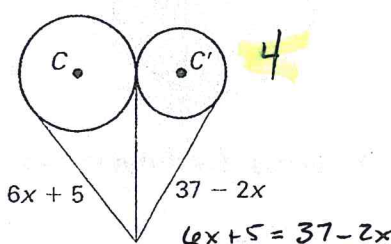
10.5

14.



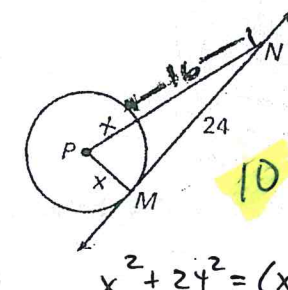
$$12^2 + x^2 = 25^2$$

16.



4

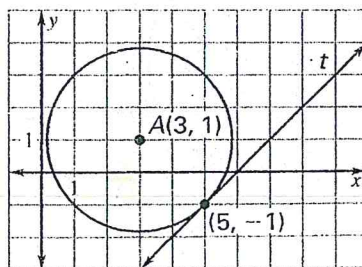
17.



$$x^2 + 24^2 = (x + 16)^2$$

Use the diagram at the right.

18. Find the radius of $\odot A$. $2\sqrt{2}$
- ~~19.~~ Find the slope of line t . 1
- ~~20.~~ Write the equation of line t .
- $y + 1 = x - 5$
or
 $y = x - 6$



Practice B

For use with pages 603-611

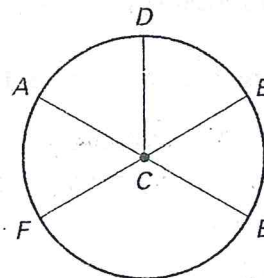
HW 1-8

9-17 odd

19-26 all

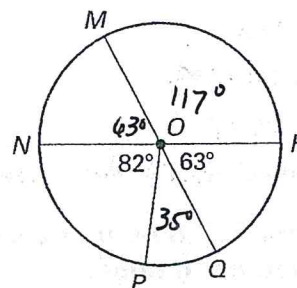
Determine whether the arc is a *minor arc*, a *major arc*, or a *semicircle* of $\odot C$.

- | | |
|--------------------------------|--------------------------------|
| 1. $\widehat{AE}$ MINOR | 2. $\widehat{ADB}$ SEMI CIRCLE |
| 3. $\widehat{FDE}$ SEMICIRCLE | 4. $\widehat{DFB}$ MAJOR |
| 5. $\widehat{FA}$ MINOR | 6. $\widehat{BE}$ MINOR |
| 7. $\widehat{BDA}$ SEMI CIRCLE | 8. $\widehat{FB}$ MINOR |

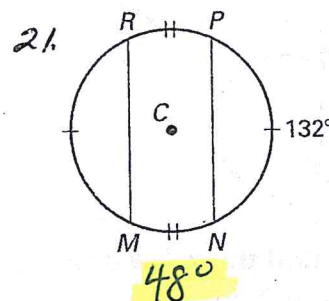
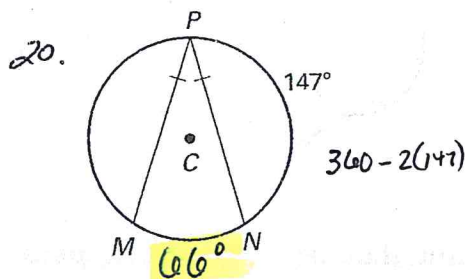
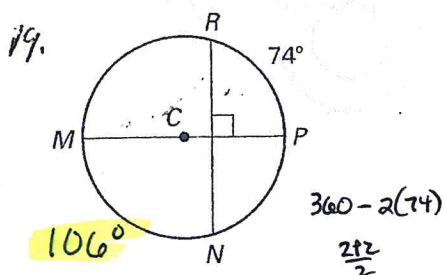


$\overline{MQ}$ and $\overline{NR}$ are diameters. Find the indicated measure.

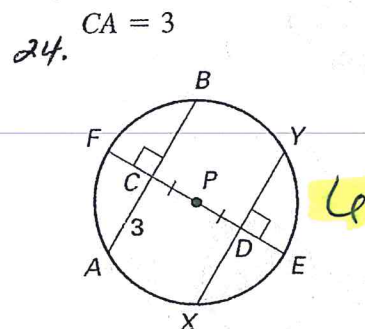
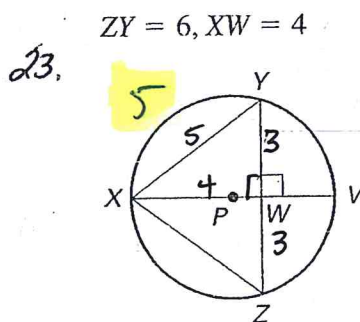
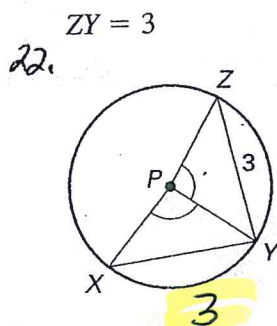
- | | |
|----------------------------------|----------------------------------|
| 9. $m\widehat{MN}$ 63° | 10. $m\widehat{NQ}$ 117° |
| 11. $m\widehat{NQR}$ 180° | 12. $m\widehat{MRP}$ 215° |
| 13. $m\widehat{QR}$ 63° | 14. $m\widehat{MR}$ 117° |
| 15. $m\widehat{QMR}$ 297° | 16. $m\widehat{PQ}$ 35° |
| 17. $m\widehat{PRN}$ 278° | 18. $m\widehat{MQN}$ 297° |



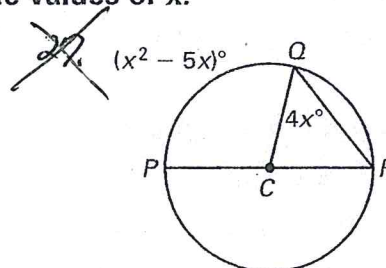
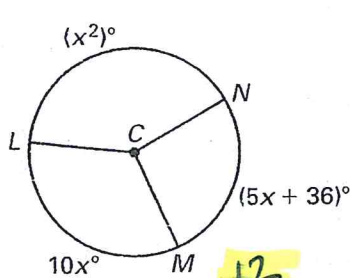
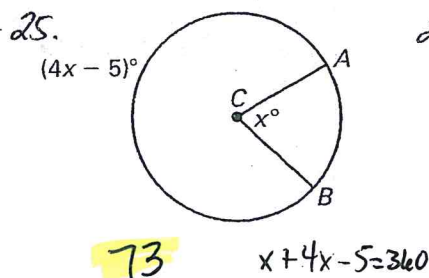
Find the measure of $\widehat{MN}$.



P is the center of the circle. Use the given information to find XY . Explain your reasoning.



In Exercises 7-9, C is the center of the circle. Find the possible values of x .

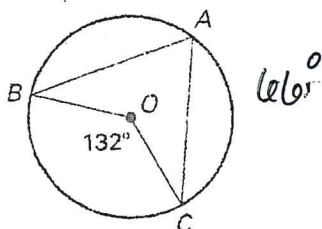


Practice B

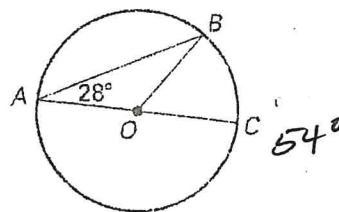
For use with pages 613-620

Find the measure of the indicated arc or angle in $\odot O$.

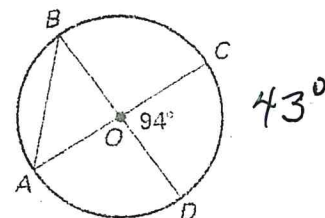
1. $m\angle BAC = ?$



2. $m\widehat{BC} = ?$



3. $m\angle BAC = ?$



Find the measure of the arc or angle in $\odot O$, given $m\widehat{CD} = 108^\circ$ and $m\widehat{BE} = 100^\circ$.

4. $m\angle ABC = 90^\circ$

5. $m\angle CED = 54^\circ$

6. $m\angle BDE = 50^\circ$

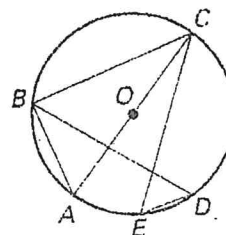
7. $m\angle CBD = 54^\circ$

8. $m\angle ABD = 36^\circ$

9. $m\angle BCE = 50^\circ$

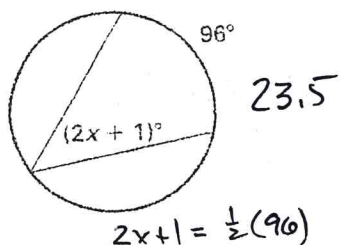
10. $m\widehat{AD} = 72^\circ$

11. $m\widehat{ABC} = 180^\circ$

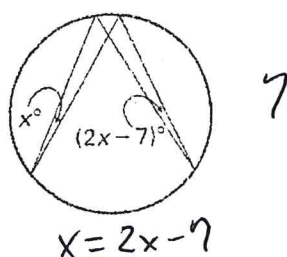


Find the value of x .

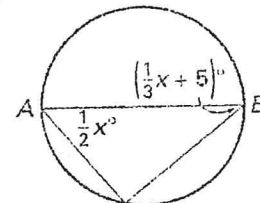
12.



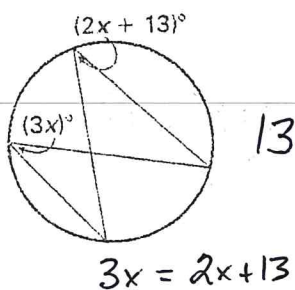
13.



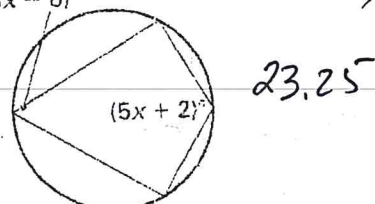
~~14.~~ diameter $\overline{AB}$



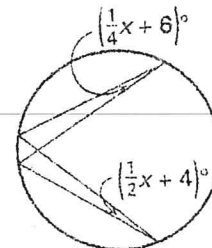
15.



16. $(3x - 8)^\circ$



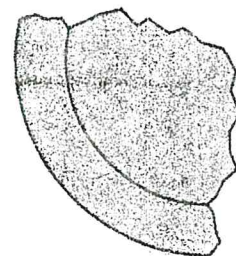
~~17.~~



$3x = 2x + 13$

$3x - 8 + 5x + 2 = 180$

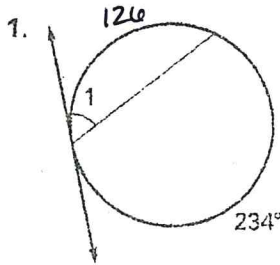
~~18.~~ **Archeology** Archeologists found a portion of a circular dinner plate. Describe a method to determine the diameter of the plate.



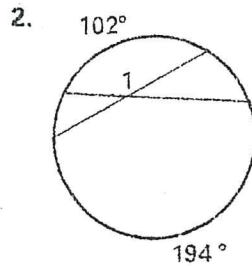
Practice B

For use with pages 621-627

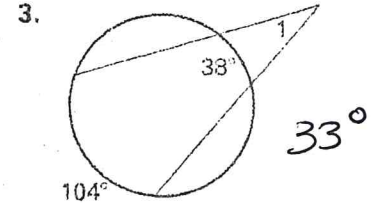
Find the measure of $\angle 1$.



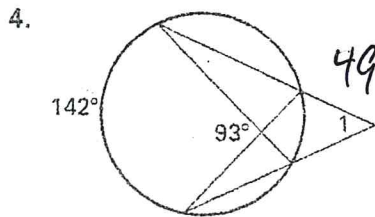
63°



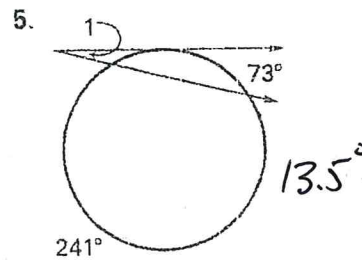
148°



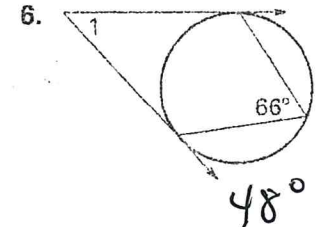
33°



49°

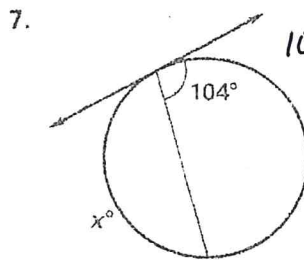


13.5°



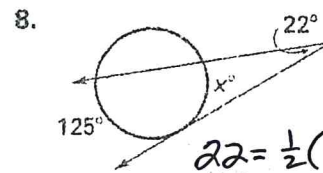
48°

Write an equation that can be used to solve for x . Then solve the equation for x .



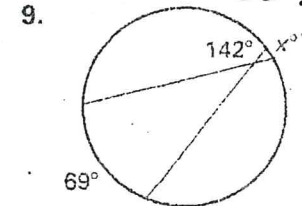
$$104 = \frac{1}{2}(360 - x)$$

152



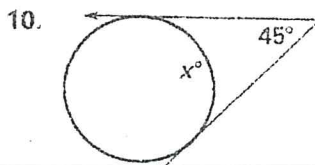
$$22 = \frac{1}{2}(125 - x)$$

81



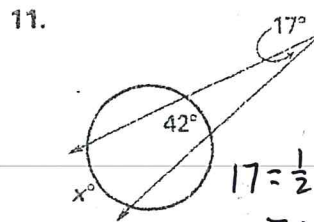
$$38 = \frac{1}{2}(x + 69)$$

7



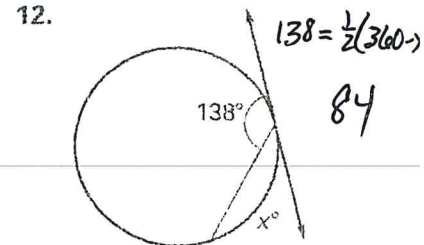
$$45 = \frac{1}{2}(360 - x)$$

135



$$17 = \frac{1}{2}(x - 42)$$

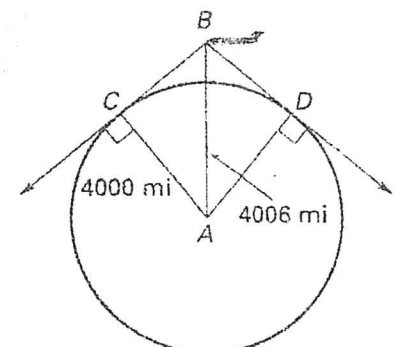
76



$$138 = \frac{1}{2}(360 - x)$$

84

13. Aerial View You are flying across the plains of Kansas at an altitude of 32,000 feet, or approximately 6 miles. It is a clear day. Find the measure of $\widehat{CD}$ that represents the part of Earth that you can see.



not drawn to scale