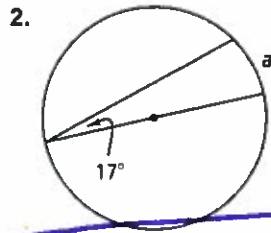
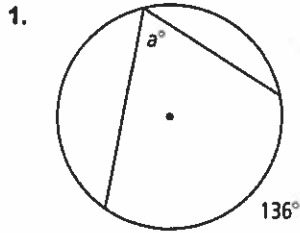


12-3 Practice

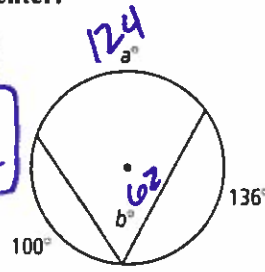
Form G

Inscribed Angles

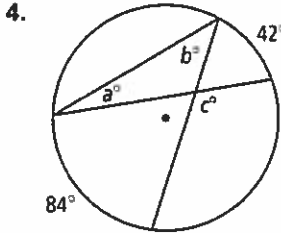
Find the value of each variable. For each circle, the dot represents the center.



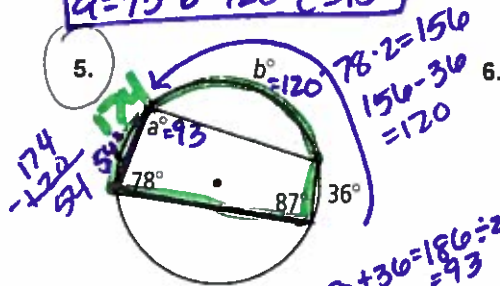
3. $a = 124$
 $b = 62$



$360 - 100 - 136 = 124$
 $124 \div 2 = 62$

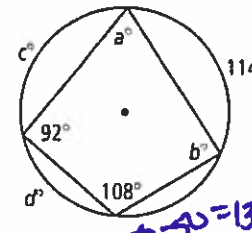


$a = 93$ $b = 120$ $c = 150$

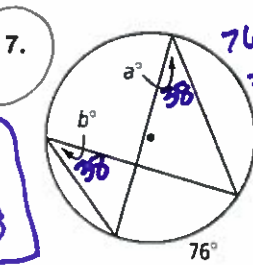


$174 - 120 = 54$
 $54 \div 2 = 27$

$78 \cdot 2 = 156$
 $156 - 36 = 120$

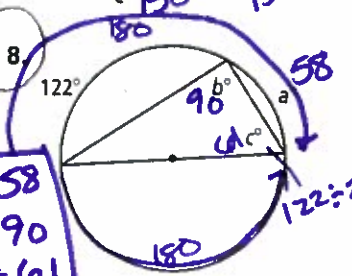


$180 - 90 = 90$



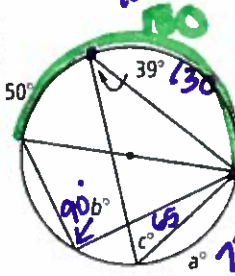
$76 \div 2 = 38$

$a = 38$
 $b = 38$



$a = 58$
 $b = 90$
 $c = 61$

$150 + 36 = 186 \div 2 = 93$

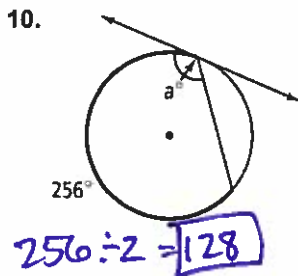


$180 - 90 = 90$

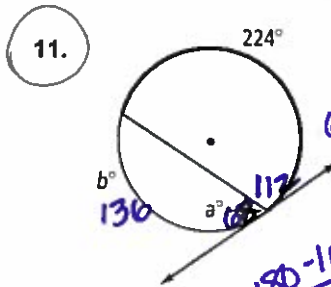
$39 \cdot 2 = 78$
 $130 - 2 = 65$

$a = 78$
 $b = 90$
 $c = 65$

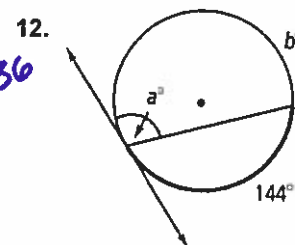
Find the value of each variable. Lines that appear to be tangent are tangent.



$256 \div 2 = 128$



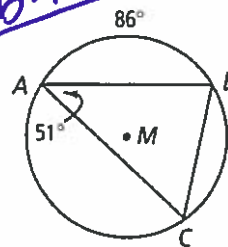
$68 \cdot 2 = 136$
 $180 - 112 = 68$
 $a = 68$
 $b = 136$



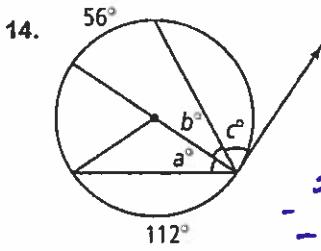
Find each indicated measure for $\odot M$.

13. a. $m\angle B$
c. $m\widehat{BC}$

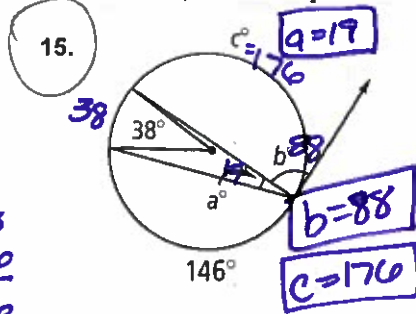
- b. $m\angle C$
d. $m\widehat{AC}$



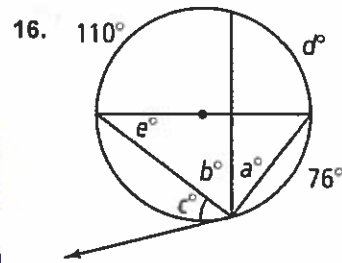
Find the value of each variable. For each circle, the dot represents the center.



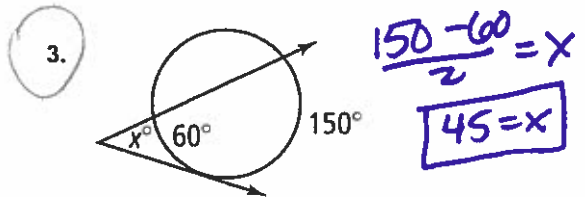
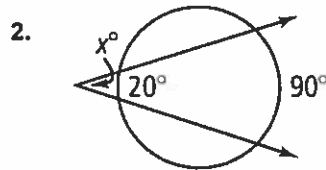
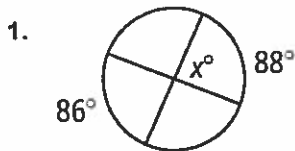
$$\begin{array}{r} 360 \\ - 38 \\ \hline 176 \end{array}$$



$$\begin{array}{l} a=19 \\ b=88 \\ c=176 \end{array}$$

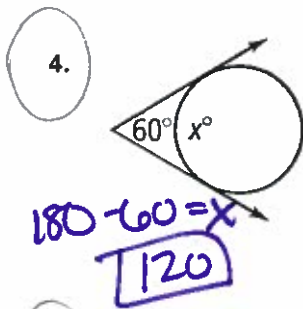


Find the value of x.



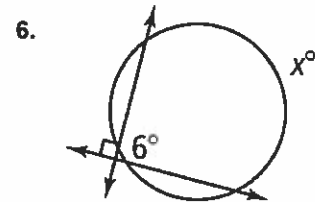
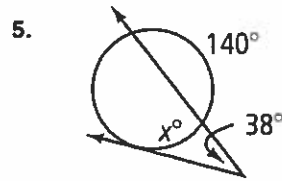
$$\frac{150 - 60}{2} = x$$

$$\boxed{45 = x}$$

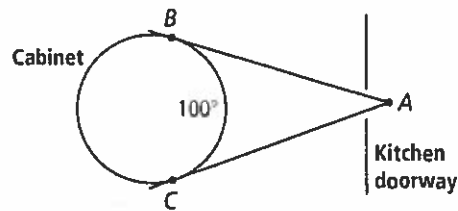


$$180 - 60 = x$$

$$\boxed{120}$$

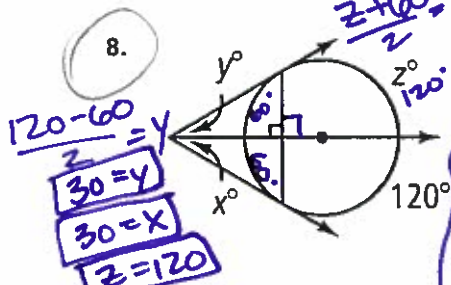


7. There is a circular cabinet in the dining room. Looking in from another room at point A, you estimate that you can see an arc of the cabinet of about 100° . What is the measure of $\angle A$ formed by the tangents to the cabinet?



$$\boxed{80^\circ}$$

Algebra Find the value of each variable using the given chord, secant, and tangent lengths. If the answer is not a whole number, round to the nearest tenth.

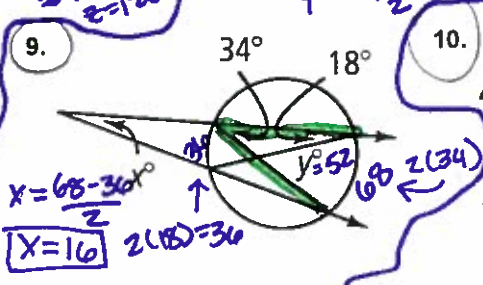


$$\frac{120 - 60}{2} = y$$

$$\boxed{30 = y}$$

$$\boxed{30 = x}$$

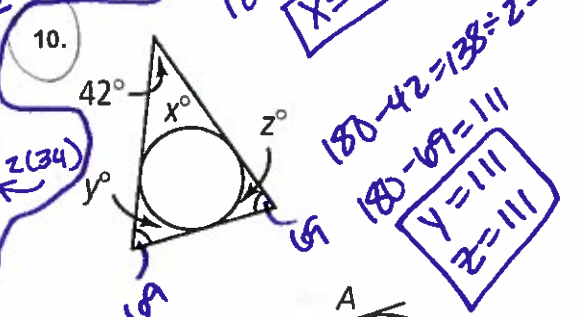
$$\boxed{z = 120}$$



$$x = \frac{68 - 36}{2}$$

$$\boxed{x = 16}$$

$$2(18) = 36$$



$$y = \frac{68 + 36}{2}$$

$$\boxed{y = 52}$$

$$180 - 42 = 138$$

$$\boxed{x = 138}$$

$$180 - 42 = 138 = 2z$$

$$180 - 69 = 111$$

$$180 - 69 = 111 = 2z$$

$$\boxed{z = 69}$$

Algebra \overline{CA} and \overline{CB} are tangents to $\odot O$. Write an expression for each arc or angle in terms of the given variable.

14. $m\widehat{AB}$ using x

15. $m\widehat{AB}$ using Y

16. $m\angle C$ using x

