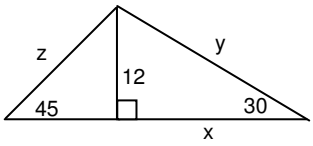
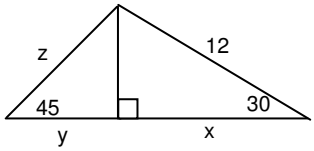
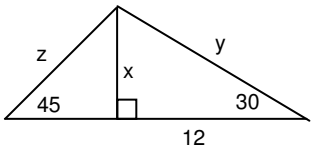
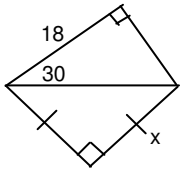
9.1 to 9.4 Geometry Review Sheet

Solve the following for the variables listed.

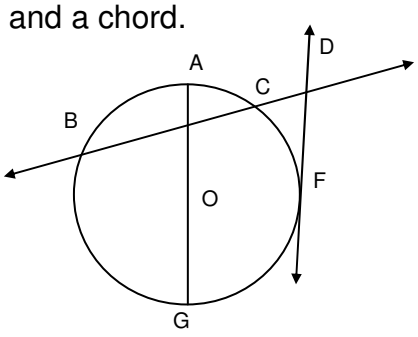
1. 

2. 

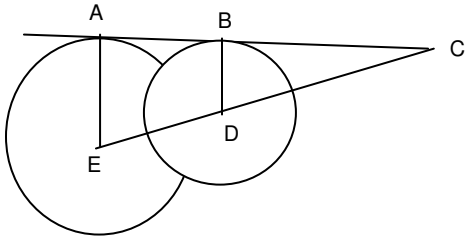
3. 

4. 

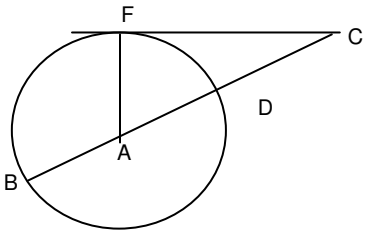
5. In the following drawing, name a radius, a diameter, a tangent, a secant, a point of tangency and a chord.



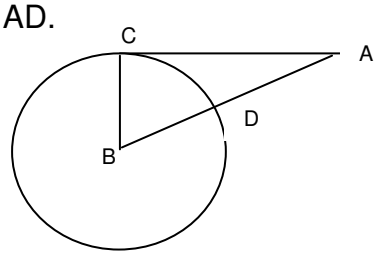
6. In the drawing, $\overleftrightarrow{AC}$ is a tangent, $\overline{AE}$ and $\overline{BD}$ are radii, AC = 24, EC = 25, and ED = 15. Find AE, BD, AB and BC.



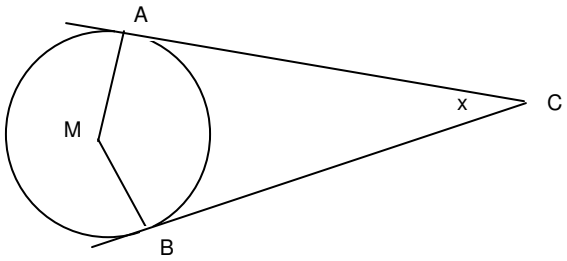
7. Find FC if DC = 5 and DB = 12.



8. In circle B if $m\overset{\frown}{CD}$ = 60 and BC = 5 find AC, AB and AD.

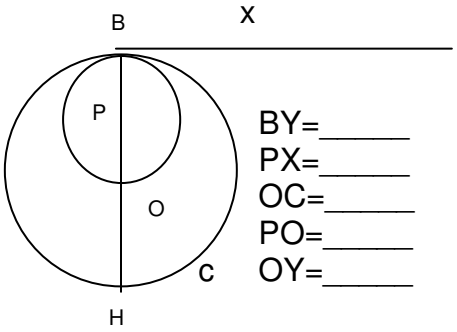


9. In circle M, if $m\overset{\frown}{AB} = 120$, find x. ($\overleftrightarrow{AC}$ and $\overleftrightarrow{BC}$ are tangents)



Solve the following.

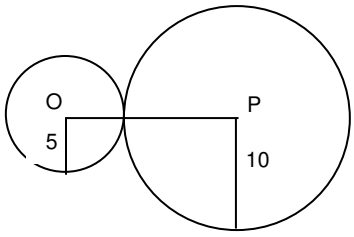
10.



IH=16
BX=3
XY=12

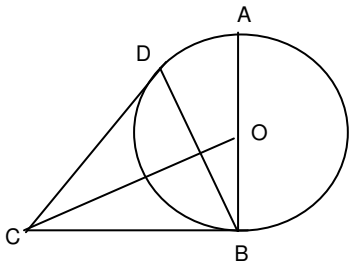
BY=_____
PX=_____
OC=_____
PO=_____
OY=_____

11.



OP = _____

12. $\overleftrightarrow{CB}$ and $\overleftrightarrow{CD}$ are tangents to ⊙O at B and D, respectively. Complete:



a) If OC = 15 and OB = 9 then BC = _____.

b) If OC = $3\sqrt{6}$ and BC = 6 then OB = _____.

c) If AB = 12 and BC = 8 then OC = _____.

d) If OC = $2\sqrt{17}$ and BC = $5\sqrt{2}$ then AB = _____.

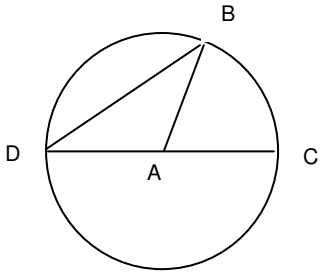
e) If m∠OCB = 30 and OB = 4 then OC = _____.

f) if m∠COB = 60 and CB = $6\sqrt{3}$ then AB = _____.

g) if m∠BCD = 70 then m∠CBD = m∠_____ = _____.

h) If m∠BCD = 50 then m∠DB0 = _____.

13. In ⊙A, if $m\overset{\frown}{BC} = 66$ find m∠BDA.



Answers:

1. x=$12\sqrt{3}$ y= 24 z= $12\sqrt{2}$

2. x= $6\sqrt{3}$ y=6 z= $6\sqrt{2}$

3. x=$4\sqrt{3}$ y=$8\sqrt{3}$ z= $4\sqrt{6}$

4. x=$6\sqrt{6}$

5. Radius OG Diameter AG Tangent DF Secant BC Pt Tangency F
chord BC

6. AE= 7 BD= 2 4/5 AB= 14 2/5 BC= 9 3/5

7. FC= $\sqrt{85}$

8. AC= $5\sqrt{3}$ AB=10 AD=5

9. x= 60

10. BY= 15 PX=5 OC= 8 PO=4 OY=17

11. 15

12. a) 12 b) $3\sqrt{2}$ c) 10 d) $6\sqrt{2}$ e) 8 f) 12 g) 55 h) 25

13. 33