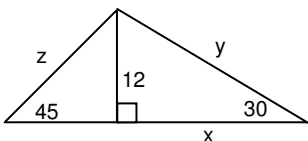


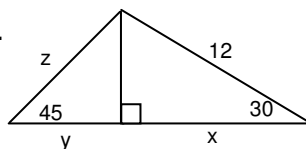
9.1 to 9.4 Geometry Review Sheet

Solve the following for the variables listed.

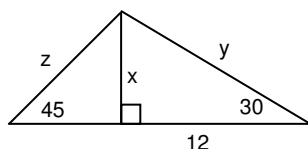
1.



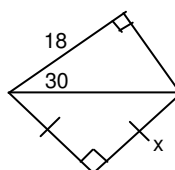
2.



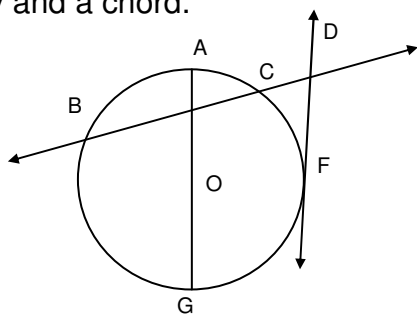
3.



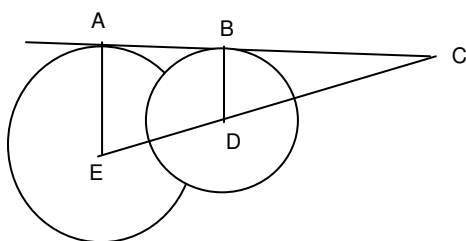
4.



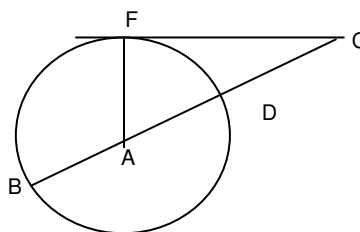
5. In the following drawing, name a radius, a diameter, a tangent, a secant, a point of tangency and a chord.



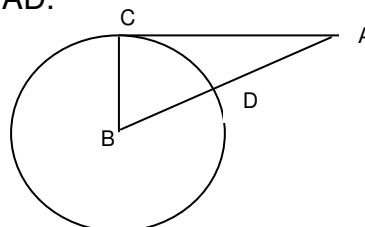
6. In the drawing, $\overleftrightarrow{AC}$ is a tangent, $\overline{AE}$ and $\overline{BD}$ are radii, $AC = 24$, $EC = 25$, and $ED = 15$. Find AE , BD , AB and BC .



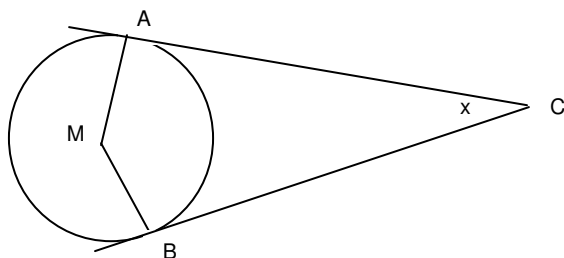
7. Find FC if $DC = 5$ and $DB = 12$.



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



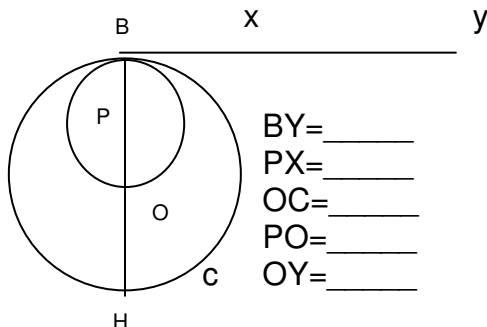
9. In circle M, if $m\widehat{AB} = 120$, find x . ($\overleftrightarrow{AC}$ and $\overleftrightarrow{BC}$ are tangents)



Solve the following.

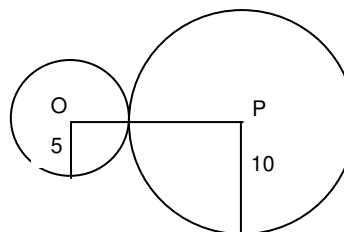
10.

IH=16
BX=3
XY=12



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

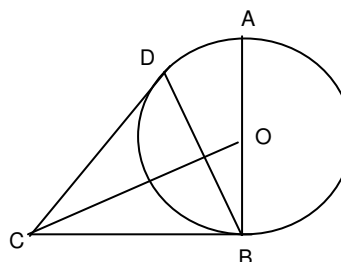
11.



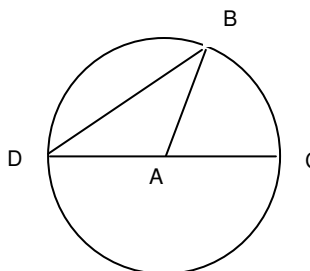
OP = _____

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

- If $OC = 15$ and $OB = 9$ then $BC = \underline{\hspace{2cm}}$.
- If $OC = 3\sqrt{6}$ and $BC = 6$ then $OB = \underline{\hspace{2cm}}$.
- If $AB = 12$ and $BC = 8$ then $OC = \underline{\hspace{2cm}}$.
- If $OC = 2\sqrt{17}$ and $BC = 5\sqrt{2}$ then $AB = \underline{\hspace{2cm}}$.
- If $m\angle OCB = 30$ and $OB = 4$ then $OC = \underline{\hspace{2cm}}$.
- If $m\angle COB = 60$ and $CB = 6\sqrt{3}$ then $AB = \underline{\hspace{2cm}}$.
- If $m\angle BCD = 70$ then $m\angle CBD = m\angle \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$.
- If $m\angle BCD = 50$ then $m\angle DBO = \underline{\hspace{2cm}}$.



13. In $\odot A$, if $m\widehat{BC} = 66$ find $m\angle BDA$.



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. $AE=7$ $BD=2\frac{4}{5}$ $AB=14\frac{2}{5}$ $BC=9\frac{3}{5}$

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