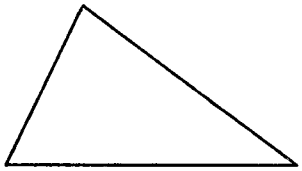
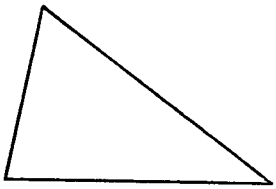
REVIEW PROBLEMS
(Chapter 11)

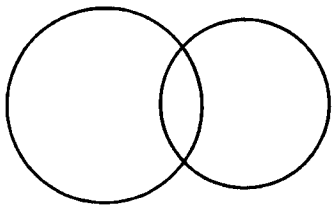
1. Construct a circumscribed circle:



2. Construct an inscribed circle:



3. Draw all the common tangents:

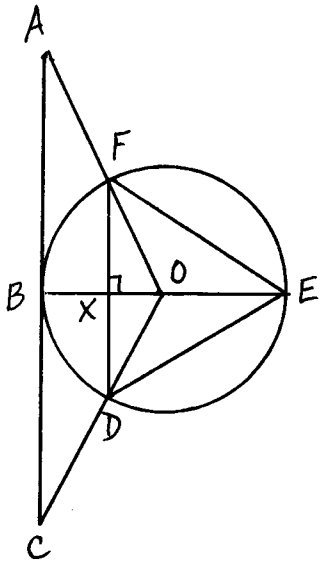


4. If a quadrilateral is inscribed in a circle, then opposite angles are _____

5. An angle inscribed in a semicircle is a(n) _____ angle

6. If a parallelogram is inscribed in a circle, then it must be a(n) _____

IN ⊙O, $\overline{AC}$ IS TANGENT AT B, AND $\overline{BE} \perp \overline{DF}$



7. If $m\angle BOF = 50°$, then $m\overset{\frown}{BF}$ = _____

8. If BE = 26 and DF = 24, then OX = _____

9. If $m\angle BOC = 70°$ then $m\angle C$ = _____

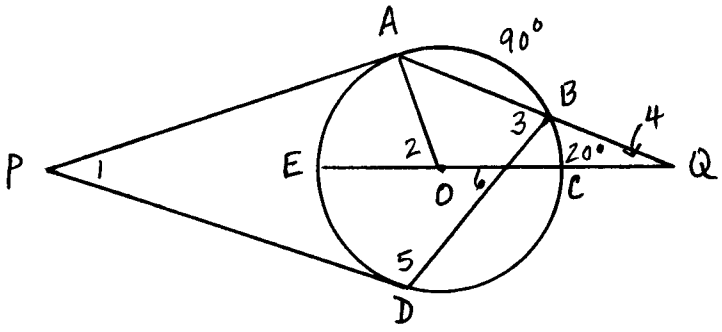
10. If $m\overset{\frown}{DEF} = 250°$ then $m\overset{\frown}{BD}$ = _____

11. If $m\overset{\frown}{BF} = 80°$ then $m\angle BEF$ = _____

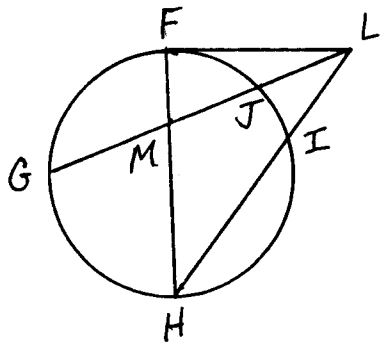
12. If $m\angle FOE = 140°$ then $m\angle FDE$ = _____

$\overline{PA}$ AND $\overline{PD}$ ARE TANGENT TO $\odot O$ AT A AND D RESPECTIVELY, $m\overset{\frown}{AB} = 90°$, $m\overset{\frown}{BC} = 20°$ AND $m\overset{\frown}{CD} = 100°$. FIND THE FOLLOWING:

13. $m\overset{\frown}{AE}$
14. $m\angle 1$
15. $m\angle 3$
16. $m\angle 5$
17. $m\overset{\frown}{DE}$
18. $m\angle 2$
19. $m\angle 4$
20. $m\angle 6$



$\overline{LF}$ IS TANGENT TO THE CIRCLE AT F:

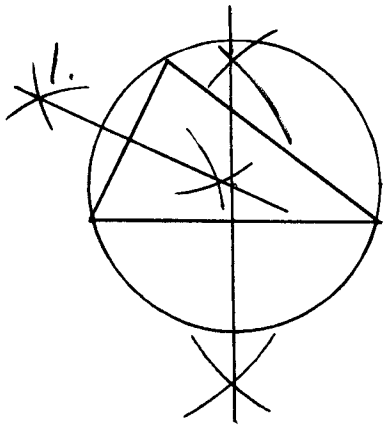


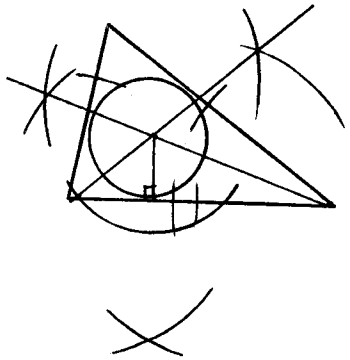
21. If $GM = 5$, $MJ = 3$ and $FM = 2$ then $MH =$ _____
22. If $LJ = 6$, $JG = 8$ and $LI = 7$, then $IH =$ _____
23. If $LJ = 3$ and $JG = 7$ then $LF =$ _____

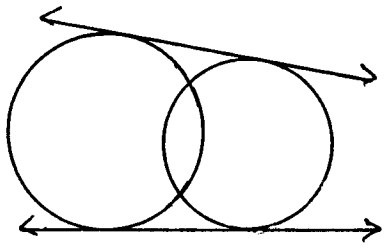
WRITE THE EQUATION OF A CIRCLE FOR EACH OF THE FOLLOWING CONDITIONS:

24. Center $(2, -3)$ and radius $= 5$
25. Center $(4, 8)$ and passing through $(-2, 1)$.

ANSWERS
(Ch 11 Review)

1. 

2. 

3. 

4. supplements
5. right
6. rectangle
7. 50°
8. 5
9. 20°
10. 55°
11. 40°
12. 70°
13. 70°
14. 30°
15. 75°
16. 120°
17. 80°
18. 70°
19. 25°
20. 50°
21. 7.5
22. 5
23. $\sqrt{30}$
24. $(x-2)^2 + (y+3)^2 = 25$
25. $(x-4)^2 + (y-8)^2 = 85$