Section 10.7
p. 489: 9, 11, 16, 19, 20, 21, 23, 24

Given: $\begin{aligned} & \triangle B=115^{\circ} \\ & \overline{A D}=60^{\circ} \\ & \overline{B C} \| \overline{E F}\end{aligned}$
Find
a. $\triangle A D C ~$
b. $\triangle C D F$
$85^{\circ}$
c. $\triangle C 85^{\circ}$
d. $\Varangle A \quad 95^{\circ}$
\# 11

\#16

\#19

a. Radius of larger $\odot$ ? 20
b. $\frac{1}{2}$

\#21 Discuss the location of the center of a circle circumscribed about each of the following types of triangle
a. Right

midst of hypotenuse
b. Acute

interior of $\Delta$
c. obtuse

\#23 Are the vertices of each figure concyclic ALWAYS, SOMETIMES, OR NEVFR. $\tau$ set of points that All be on a circle
a. rectangle $A$
b A parallelogram $S$
c. A rhombus $S$
d. a non-isosceles trapezoid $N$
e. an equilateral polygon $S$
f. an equiangular polygon $S$
\#24 A right triangle has legs measunng 5 and 12. Find the ratio of the area of the inscribed circle to the area of the circumscribed circle.


$$
\begin{aligned}
& 15-x+12-x=13 \\
& 17-2 x=13 \\
&-2 x=-4 \\
& x=2
\end{aligned} \quad \begin{aligned}
A_{0_{\text {small }}} & =\pi(2)^{2} \\
& =4 \pi \\
A_{0_{\text {Big }}} & =\pi\left(\frac{13}{2}\right)^{2} \\
& =\frac{169 \pi}{4}
\end{aligned}
$$

Ratio: $\frac{4 \pi}{169 \pi / 4}=\frac{4}{169} \cdot 4=\frac{16}{169}$

