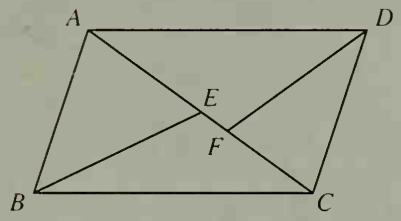
Given: $ABCD$ is a parallelogram;
$\overline{AD} \cong \overline{AC}$; $\overline{AE} \cong \overline{EC}$
$\angle ADF \cong \angle CDF$; $m\angle DAC = 36$
Complete each statement about the diagram.



18. $\overline{AE} \cong \overline{EC}$, so $\overline{BE}$ is a(n) ___? of $\triangle ABC$.

19. $\angle ADF \cong \angle CDF$, so $\overline{DF}$ is a(n) ___? of $\angle ADC$.

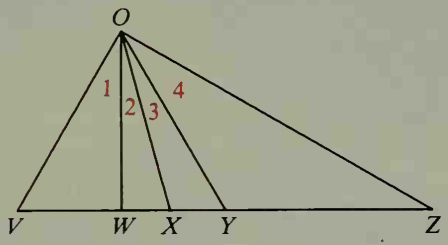
20. $\triangle ADC$ is a(n) ___? triangle.

21. $m\angle DAC = 36$, so $m\angle ADC =$ ___? and $m\angle ADF =$ ___?.

22. $\triangle ADF$ is a(n) ___? triangle.

23. $\angle ADC \cong \angle$ ___? $\cong \angle$ ___? $\cong \angle$ ___? $\cong \angle$ ___?.

In the diagram, $m\angle VOZ = 90$.
$\overline{OW}$ is an altitude of $\triangle VOZ$.
$\overline{OX}$ bisects $\angle VOZ$.
$\overline{OY}$ is a median of $\triangle VOZ$.
Find the measures of the four numbered angles.



24. $m\angle Z = 30$ **25.** $m\angle Z = k$

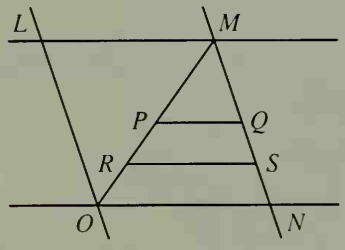
In Exercises 26–29, complete each statement about the diagram. Then state the definition, postulate, or theorem that justifies your answer.

26. If $LM = ON$ and $LO = MN$, then $LMNO$ is a ___?.

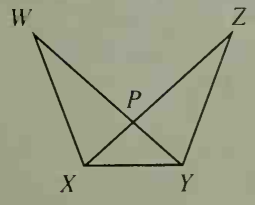
27. If $LMNO$ is a rhombus, then $\angle LOM \cong$ ___? $\cong$ ___? $\cong$ ___?.

28. If $MP = PO$ and $\overline{PQ} \parallel \overline{ON}$, then Q is the ___? of ___?.

29. If $\overline{PQ} \parallel \overline{ON}$, $PR = RO$ and $QS = SN$, then $RS = \frac{1}{2}($___? $+$ ___?$)$.



30. Given: $WP = ZP$; $PY = PX$
Prove: $\angle WXY \cong \angle ZYX$



31. Given: $\overline{AD} \cong \overline{BC}$; $\overline{AD} \parallel \overline{BC}$
Prove: $\overline{EF} \cong \overline{FG}$