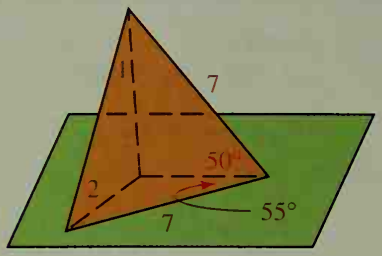
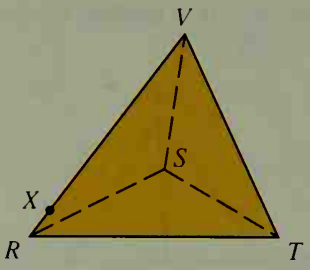
**Complete the statements by writing $<$, $=$, or $>$.**

**B** **9.** $m\angle 1 \underline{\ ?\ } m\angle 2$




**10.** $SR = ST$; $VX = VT$

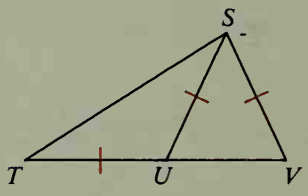
$m\angle RSV \underline{\ ?\ } m\angle TSV$




**Write proofs in two-column form.**

**11.** Given: $\overline{TU} \cong \overline{US} \cong \overline{SV}$

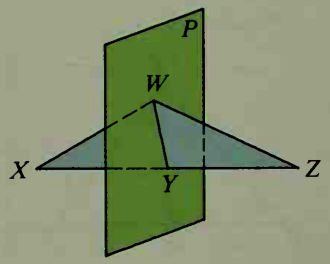
Prove: $ST > SV$




**12.** Given: Plane $P$ bisects $\overline{XZ}$ at $Y$;

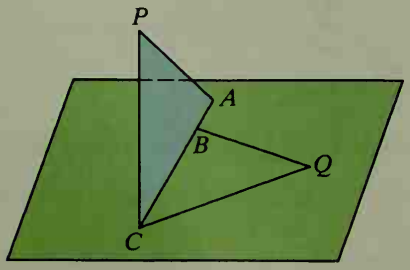
$WZ > WX$

Discover and prove something about the figure.




**C** **13.** Given: $\overline{PA} \cong \overline{PC} \cong \overline{QC} \cong \overline{QB}$

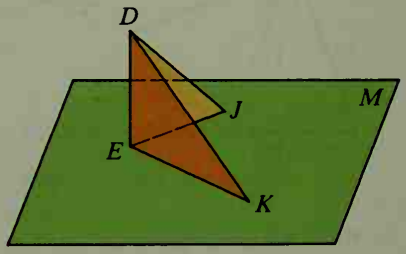
Prove: $m\angle PCA < m\angle QCB$




**14.** Given: $\overline{DE} \perp$ plane $M$; $EK > EJ$

Prove: $DK > DJ$

(*Hint*: On $\overline{EK}$, take $Z$ so that $EZ = EJ$.)




**15.** In the three-dimensional figure shown, all the edges *except* $\overline{VC}$ are congruent. What can you say about the measures of the largest angles of the twelve angles in the figure

**a.** if $\overline{VC}$ is longer than the other edges?

**b.** if $\overline{VC}$ is shorter than the other edges?