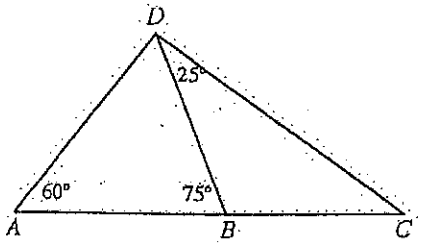
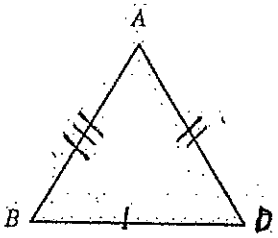
CH 4 Practice Test - Geometry

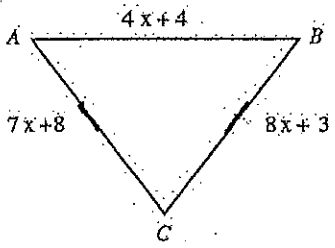
1. Classify ΔDBC by its angles



2. Classify ΔABD by its side lengths



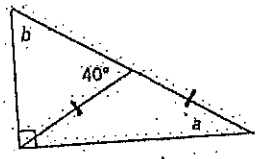
3. ΔABC is an isosceles triangle. $\angle C$ is the vertex angle. Find the length of AB.



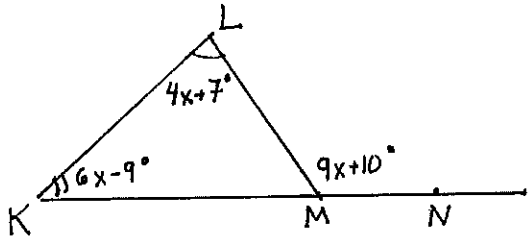
4. Solve for the variables

a=

b=

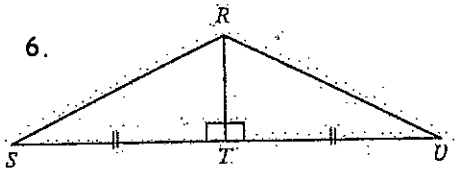


5. Solve for $m\angle K$.

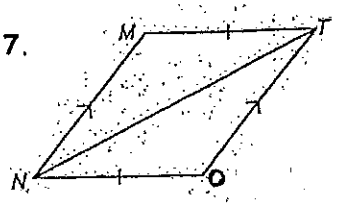


#6-10, Determine whether or not the triangles are congruent. State your reason. IF the Δs are congruent, then write their congruence statement (i.e. name the two congruent triangles).

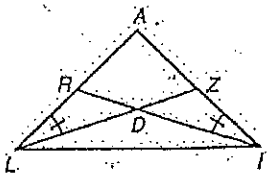
6.



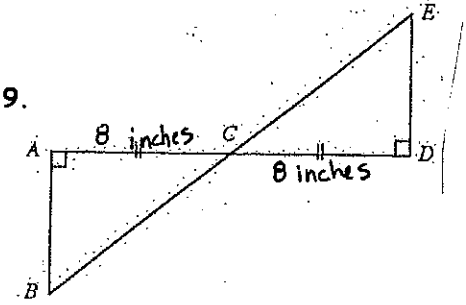
7.



8. ΔLAI is isosceles with $LA \cong IA$.

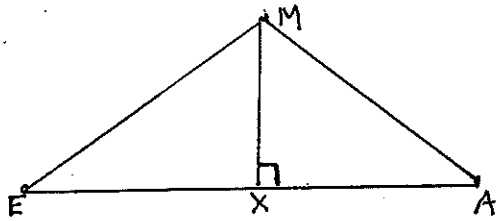


9.

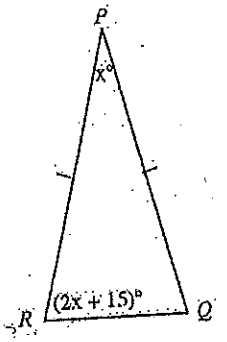


#6-10, Determine whether or not the triangles are congruent. State your reason. IF the Δs are congruent, then write their congruence statement (i.e. name the two congruent triangles).

10.



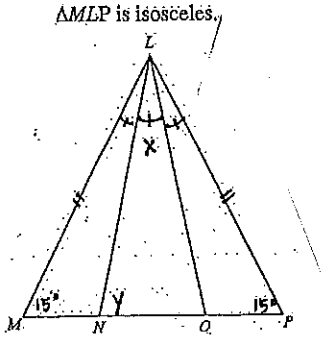
11. Solve for $m\angle Q$.



12. Solve for each variable.

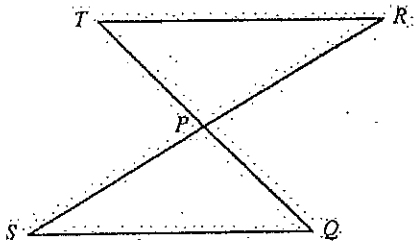
X =

Y =



#13-14, Here's what you've been waiting for! Write a two-column proof for each.

13. **Given:** P is the midpoint of $\overline{TQ}$ and $\overline{RS}$.
Prove: $\Delta TPR \cong \Delta QPS$



14. **Given:** $\angle CBA \cong \angle CDA$, $\overline{AC}$ bisects $\angle BAD$
Prove: $\overline{AD} \cong \overline{AB}$