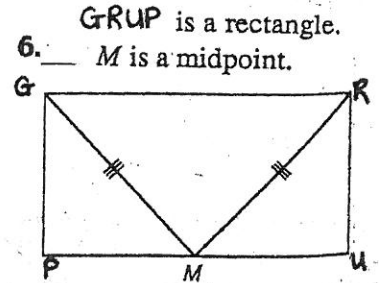
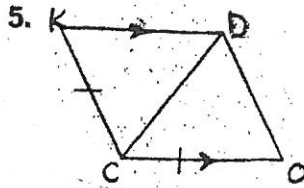
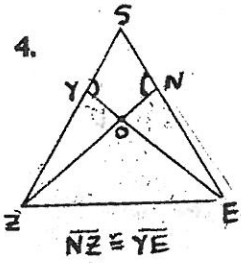
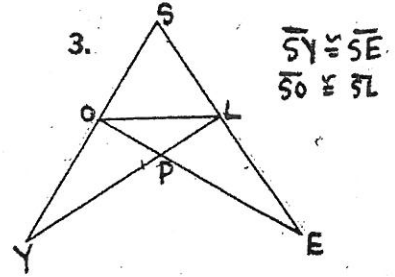
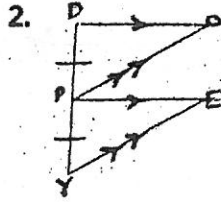
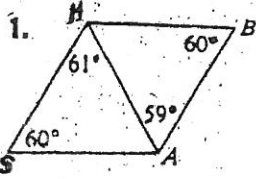
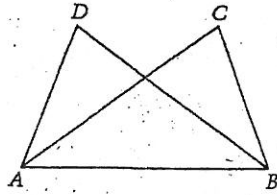


#1-6, Are the two triangles congruent? Why or why not? If the triangles are congruent, name them.

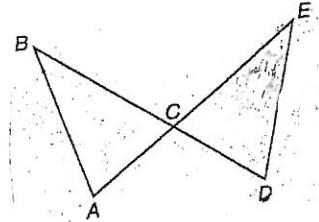


#7-10, Write a two column proof. (Note: # 8, 9 and #10 you are proving parts are congruent)

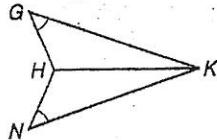
7. Given: $AD = BC$; $m\angle DAB = m\angle CBA$
Prove: $\triangle ADB \cong \triangle BCA$



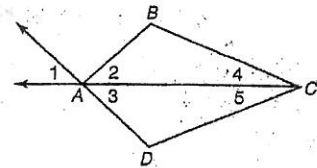
8. Given: $\angle A \cong \angle D$
 $\overline{AB} \cong \overline{DE}$
Prove: $\overline{CA} \cong \overline{CD}$



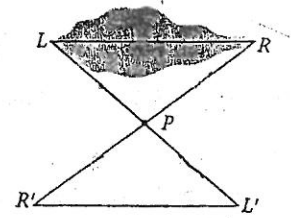
9. Given: \overline{HK} bisects $\angle GKN$.
 $\angle G \cong \angle N$
Prove: $\overline{GK} \cong \overline{NK}$



10. Given: $\angle 2 \cong \angle 1$
 $\angle 4 \cong \angle 5$
Prove: $\overline{BC} \cong \overline{DC}$



11. To measure the width of the pond Kira and Ian place a marker at P and stand at the two ends of the pond. Kira paces the distance from L to P, 13 paces, then continues walking the same number of paces straight ahead. Ian begins at R and does the same thing, which takes him 19 paces. Ian then walks to Kira which is 24 paces. How wide is the pond? How do Kira and Ian know this will work?



Draw and label triangles MNO and XYZ. Indicate the additional pair of corresponding parts needed to prove the triangles are congruent by the indicated method.

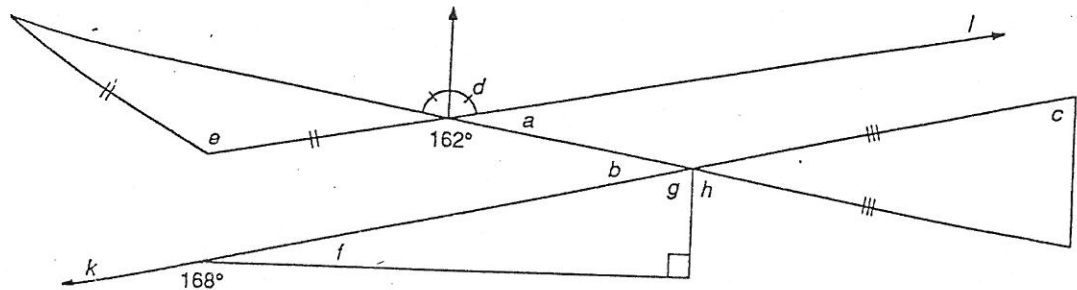
12. $\angle N = \angle Y$ & $NO = YZ$; ASA

13. $\angle O = \angle Z$ & $MO = XZ$; AAS

14. $\angle N = \angle Y = 90^\circ$ & $YZ = NO$; HL

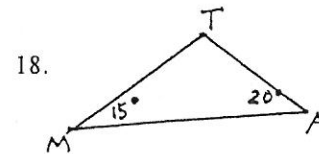
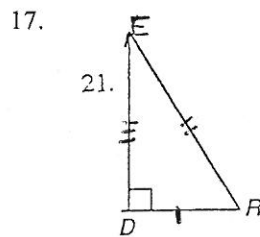
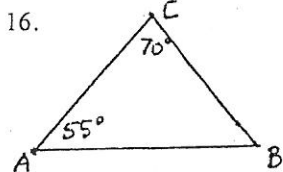
15. Find the measure of each indicated angle. $l \parallel k$

a =
b =
c =
d =
g =
h =



(Isn't this one fun?)

#16-18, Classify each triangle by angles and sides.



#19-20, Solve for the variables.

