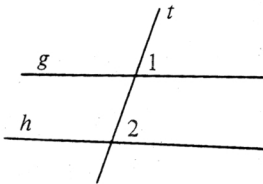


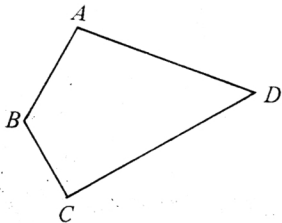
Written Exercises

Write indirect proofs in paragraph form.

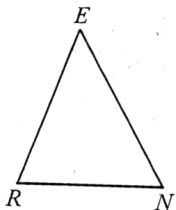
- A 1. Given: Transversal t cuts lines g and h ;
 $\angle 1 \neq \angle 2$
 Prove: g is not parallel to h .



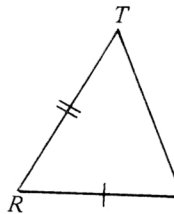
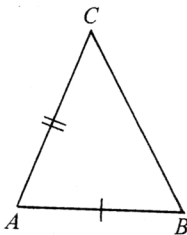
2. Given: Quad. $ABCD$
 Prove: $\angle A$, $\angle B$, and $\angle C$ are not all 120° angles.



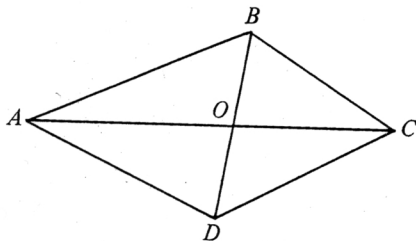
- B 3. Given: Scalene $\triangle REN$
 Prove: $\angle R \neq \angle N$



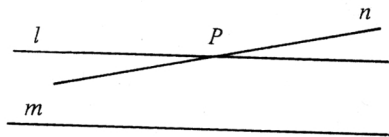
4. Given: $AC = RT$; $AB = RS$;
 $\angle A \neq \angle R$
 Prove: $BC \neq ST$



5. Given: \overline{OA} is a median of $\triangle ABD$;
 \overline{OB} is not a median of $\triangle ABC$.
 Prove: Quad. $ABCD$ is not a \square .



6. Given: Coplanar lines l , m , n ;
 n intersects l in P ;
 $l \parallel m$
 Prove: n intersects m .



7. Prove that there is no smallest positive number.
 8. Prove that a collection of nickels and dimes having the value 145¢ must have an odd number of nickels.
 9. Prove that if x and y are integers and $3x + 12y = 450$, then x is even.