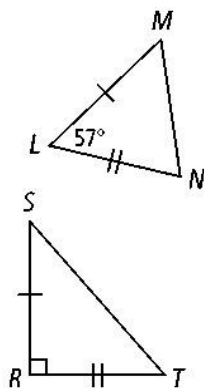


5-7 Practice

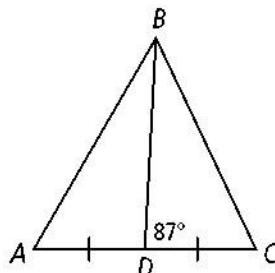
Inequalities in Two Triangles

Write an inequality relating the given side lengths. If there is not enough information to reach a conclusion, write *no conclusion*.

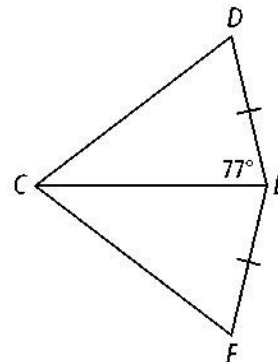
1. ST and MN



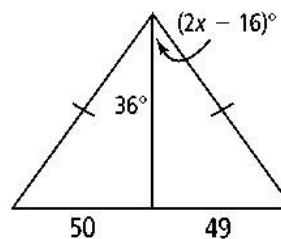
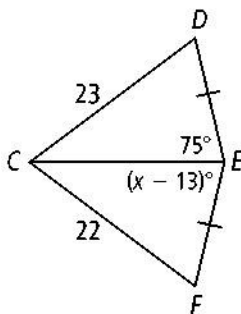
2. BA and BC



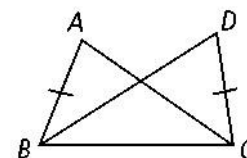
3. CD and CF



4. Find the range of possible values for each variable.



5. In the triangles at the right, $AB = DC$ and $m \angle ABC < m \angle DCB$. Explain why $AC < BD$.

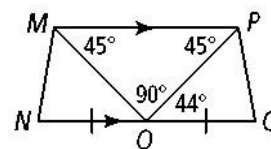


Copy and complete with $>$ or $<$. Explain your reasoning.

6. $m \angle POQ \underline{\quad ? \quad} m \angle MON$

7. $MN \underline{\quad ? \quad} PQ$

8. $MP \underline{\quad ? \quad} OP$



9. The legs of an isosceles triangle with a 65° vertex angle are congruent with the sides of an equilateral triangle.

Which triangle has a greater perimeter? How do you know?

Write an inequality relating the given angle measures. If there is not enough information to reach a conclusion, write *no conclusion*.

17. $m \angle L$ and $m \angle R$

18. $m \angle MLN$ and $m \angle ONL$

