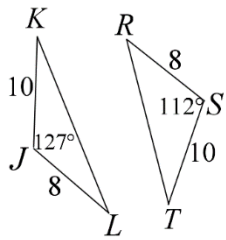


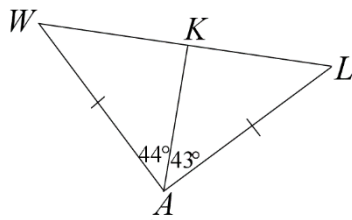
Name _____

Inequalities in Two Triangles

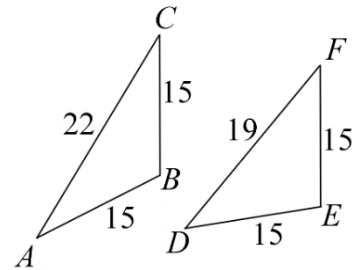
Compare the given measures using $<$ or $>$.



1. KL _____ RT

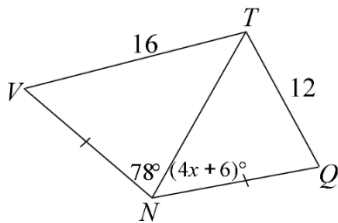


2. WK _____ KL

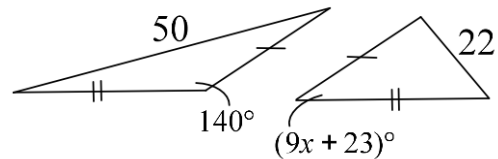


3. $m\angle B$ _____ $m\angle E$

Find the range of values for x .



4. _____ $< x <$ _____



5. _____ $< x <$ _____

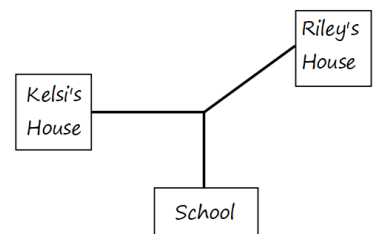
6. \overline{KM} is a median of $\triangle JKL$ and $JK > KL$. Compare $m\angle LMK$ to $m\angle JMK$.

$m\angle LMK$ _____ $m\angle JMK$

7. $\triangle CAT$ is an isosceles triangle with base \overline{CT} . $\triangle DOG$ is an isosceles triangle with base \overline{DG} . Given that $\overline{CA} \cong \overline{DO}$ and $m\angle A > m\angle O$, compare CT and DG .

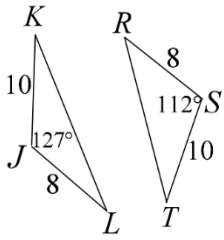
CT _____ DG

8. Kelsi and Riley walk home from school. They travel together for half of a mile before parting ways and each traveling $\frac{3}{4}$ of a mile more as picture at the right. Who lives farther from the school? Explain.

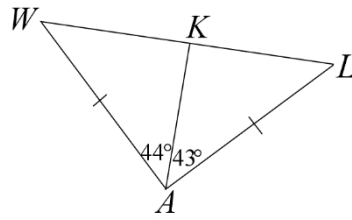


Inequalities in Two Triangles Answers

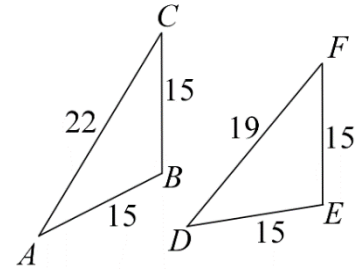
Compare the given measures using $<$ or $>$.



1. $KL > RT$

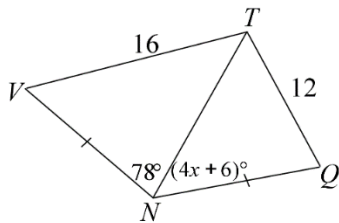


2. $WK > KL$

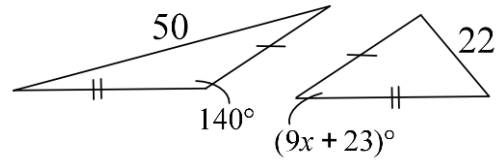


3. $m\angle B > m\angle E$

Find the range of values for x .



4. $-1.5 < x < 18$



5. $-\frac{23}{9} < x < 13$

6. \overline{KM} is a median of $\triangle JKL$ and $JK > KL$. Compare $m\angle LMK$ to $m\angle JMK$.

$$m\angle LMK < m\angle JMK$$

7. $\triangle CAT$ is an isosceles triangle with base \overline{CT} . $\triangle DOG$ is an isosceles triangle with base \overline{DG} . Given that $\overline{CA} \cong \overline{DO}$ and $m\angle A > m\angle O$, compare CT and DG .

$$CT > DG$$

8. Kelsi and Riley walk home from school. They travel together for half of a mile before parting ways and each traveling $\frac{3}{4}$ of a mile more as picture at the right. Who lives farther from the school? Explain.

Riley lives farther away from the school. The angle formed by the path to Riley's house is larger than the angle formed by the path to Kelsi's house.

