

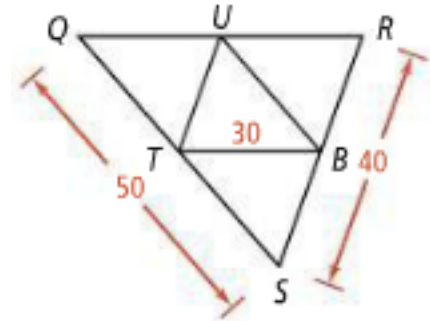
Name: _____
 Geometry

Date: _____
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Unit 5: Relationships Within Triangles

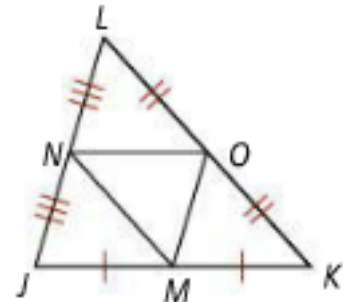
LT#1: Use properties of midsegments to solve problems.

1. In $\triangle QRS$, T , U , and B are midpoints. What are the lengths of \overline{TU} , \overline{UB} , and \overline{QR} ? What are the perimeters of $\triangle QRS$ and $\triangle TUB$?



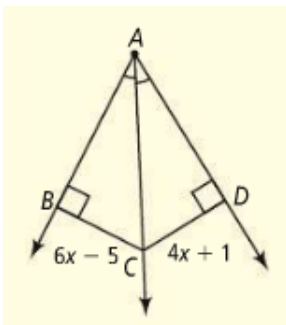
Use the figure at the right for #2-4.

2. Which segment is parallel to \overline{JK} ?
3. If $LK = 46$, what is NM ?
4. If $JK = 5x + 20$ and $NO = 20$, what is the value of x ?

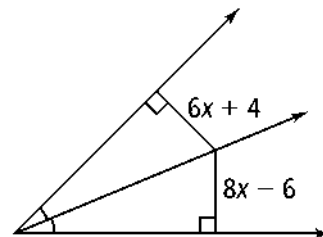


LT#2: Use properties of perpendicular bisectors and angle bisectors.

5. What is CD ?



6. Find the value of x .



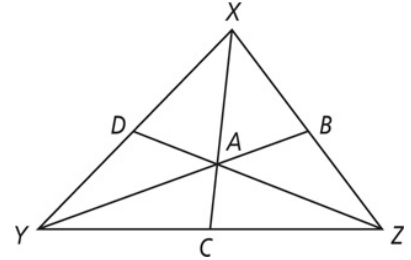
LT#4: Identify properties of medians and altitudes of a triangle.

In $\triangle XYZ$, A is the centroid.

7. If $DZ = 12$, find ZA and AD .

8. If $AB = 6$, find BY and AY .

9. If $AC = 3$, find CX and AX .



LT#6: Use inequalities involving angles and sides of triangles.

The lengths of two sides of a triangle are given. Find the range of possible lengths for the third side.

10. 4, 8

11. 13, 8

12. 10, 15