

Chapter 6 Review

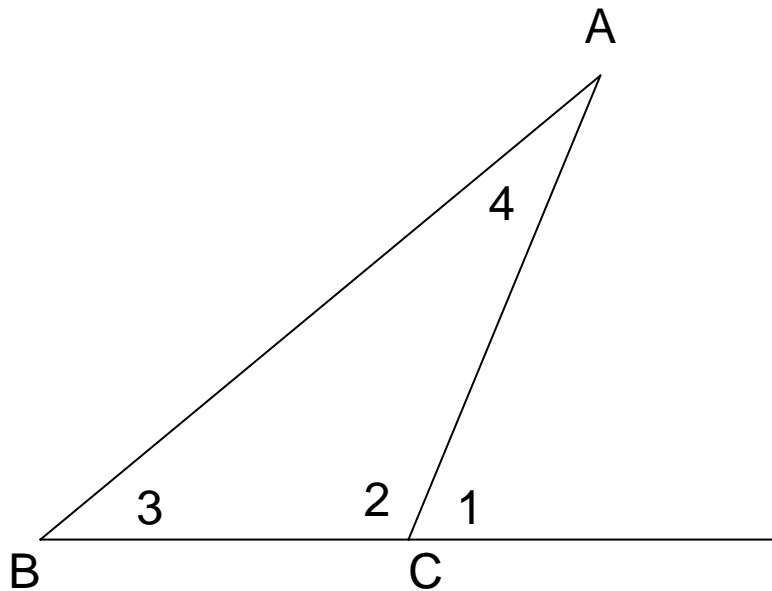
Do you know the ...

Additive property of inequality?	
Subtraction property of inequality?	
Multiplication property of inequality by a positive number?	
Multiplication property of inequality by a negative number?	

Do you know the ...

Division property of inequality by a positive number?	
Division property of inequality by a negative number?	
Transitive property of inequality?	
Part of a whole property?	

Based on the diagram, what can you conclude about the angles?



$$m\angle 1 = m\angle 3 + m\angle 4$$

$$m\angle 1 + m\angle 2 = 180^\circ$$

$$m\angle 2 + m\angle 3 + m\angle 4 = 180^\circ$$

$$m\angle 1 > m\angle 3$$

$$m\angle 1 > m\angle 4$$

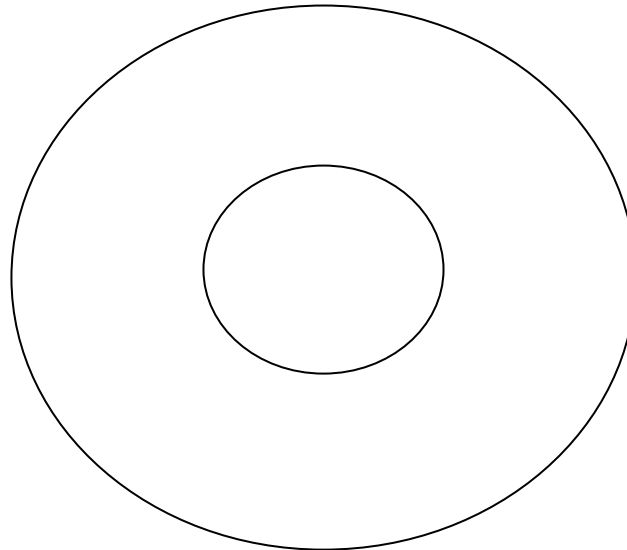
Conditional Relationships

- If I do not drive to work, then I walk to work.

	Statement	True or False?
Conditional		
Contrapositive		
Converse		
Inverse		

Conditional Relationships

- Conditional Statement: I am registered to vote. Therefore, I am at least 18 years of age.
- Write the If-Then form of the conditional.
- Draw the Venn Diagram related to this conditional.



Conditional Relationships

- Based on the previous conditional and the additional information given below, what can you conclude, if anything?
- Justin is registered to vote.
- Jacob is 17 years old.
- Joshua is not registered to vote.
- Jeremy is 27 years old.

Conditional Relationships

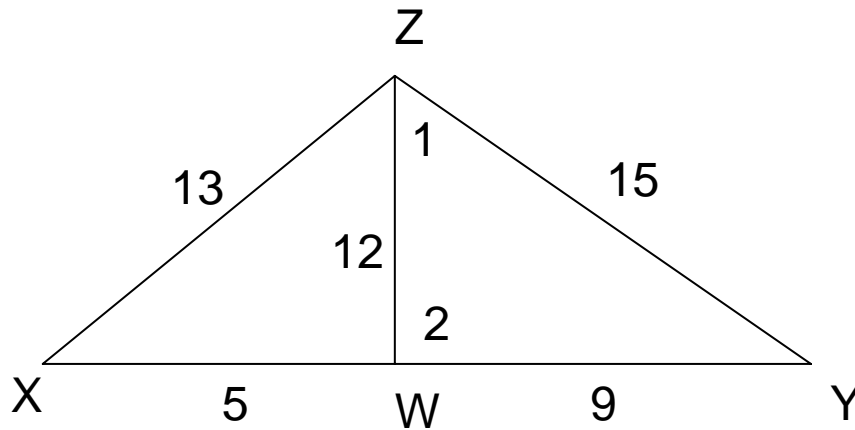
Given: The diagonals of a rhombus are perpendicular. What can you conclude based on the following additional information?

- JKLM is a rhombus.
- In quadrilateral DIME, segment DM is perpendicular to segment IE.
- STUV is not a rhombus.
- In quadrilateral NOPQ, segment NP is not perpendicular to segment OQ.

Inequalities in a Triangle

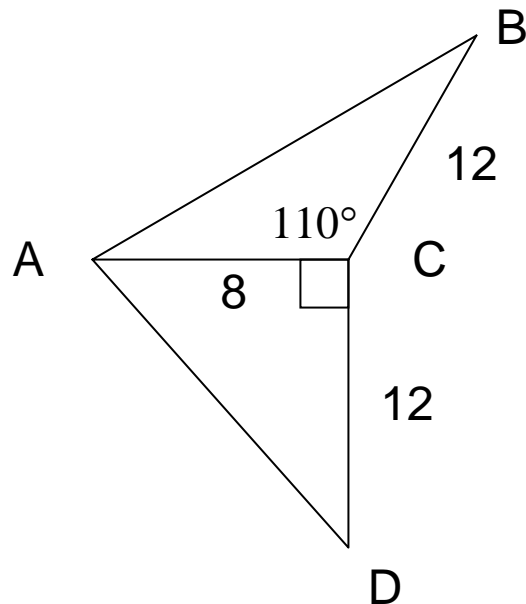
- The diagram is NOT drawn to scale. Indicate the relationships of angles 1, 2, X, Y, and XZY.

_____ > _____ > _____ > _____ > _____



Inequalities in 2 Triangles

- Given the figure, determine the relationship between the sides or angles. Justify your answers!



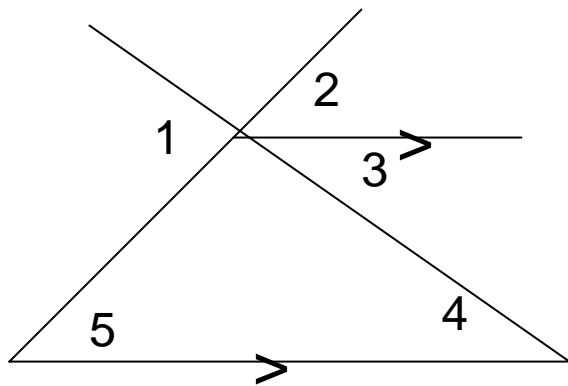
$$m\angle CAD \text{ ____ } m\angle D$$

$$\overline{AD} \text{ ____ } \overline{AB}$$

$$m\angle B \text{ ____ } m\angle BAC$$

Inequalities in 2 Triangles

- Given the figure, determine the relationship between the sides or angles. Justify your answers!



$$m\angle 1 \underline{\hspace{1cm}} m\angle 5$$

$$m\angle 1 \underline{\hspace{1cm}} m\angle 2$$

$$m\angle 3 \underline{\hspace{1cm}} m\angle 4$$

$$m\angle 5 \underline{\hspace{1cm}} m\angle 2$$