NAME_____DATE_____PERIOD_____

Unit 2 Proofs and Congruent Triangles REVIEW PROBLEMS

Vocabulary Review: Define each of the following:

1. Acute triangle

2. Equiangular Triangle

3. Obtuse Triangle

4. Right Triangle

5. Isosceles Triangle

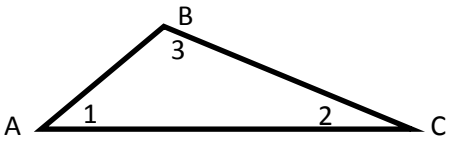
6. Scalene Triangle

7. Congruent Triangles

8. Corresponding Parts

9. Equilateral Triangle

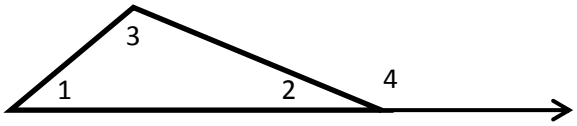
Use the triangle below to answer questions 10 and 11.



10. What is the **included angle** between sides $\overline{AB}$ *and* $\overline{BC}$? _____

11. What is the **included side** between <1 and <2? _____

Use the triangle below to answer questions 12 - 14.

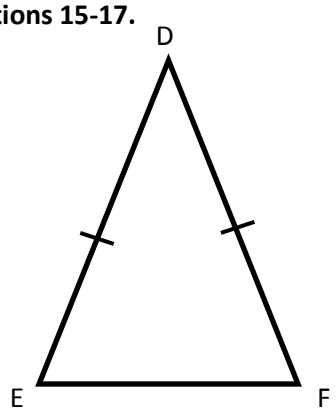


12. Which two angles represent the remote interior angles? _____, _____

13. Which angle represents the exterior angle? _____

14. Fill in the blanks: The exterior angle theorem states that _____ + _____ =_____

Use the following isosceles triangle to answer questions 15-17.



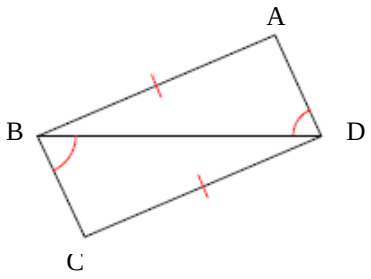
15. Name the **vertex angle**. _____

16. Name the **base angles**. _____, _____

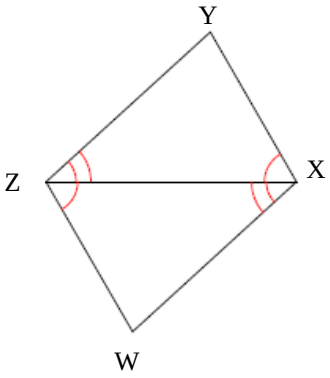
17. Name the **legs**. _____, _____

State if the two triangles are congruent. If they are, state how you know (SSS, SAS, ASA, AAS) and write the congruency statement.

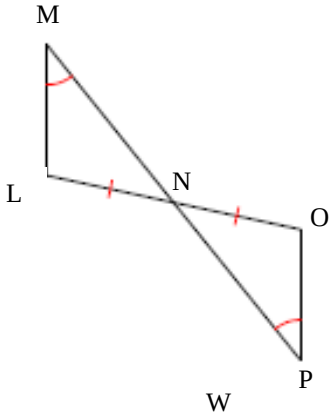
18.



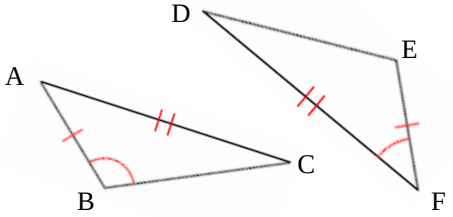
19.



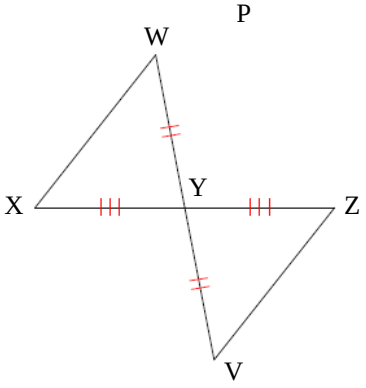
20.



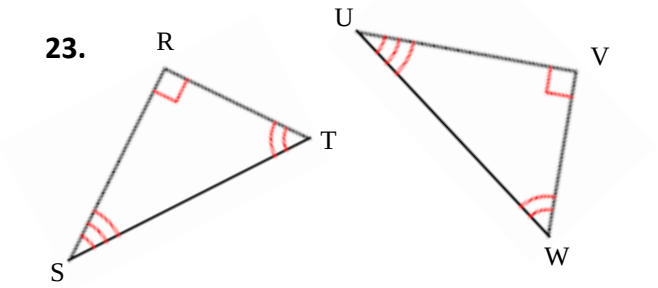
21.



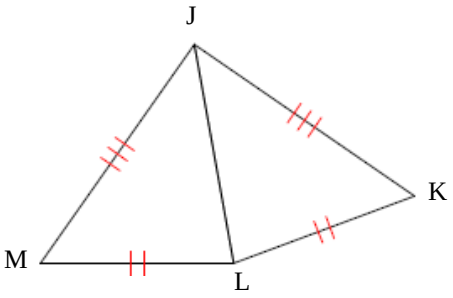
22.



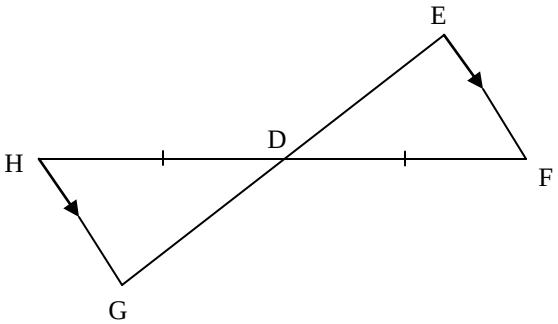
23.



24.

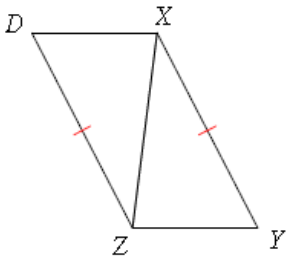


25.

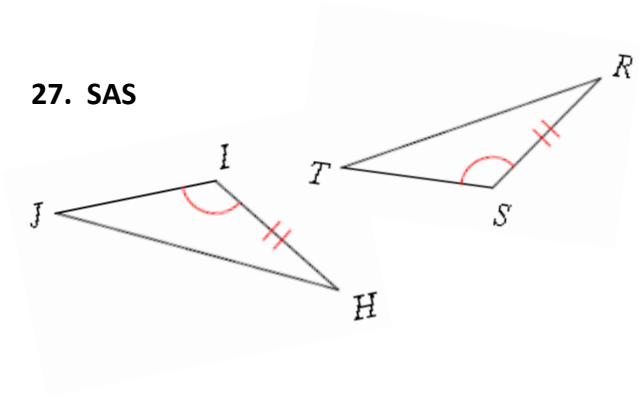


State what additional information is required in order to know that the triangles are congruent for the reason given.

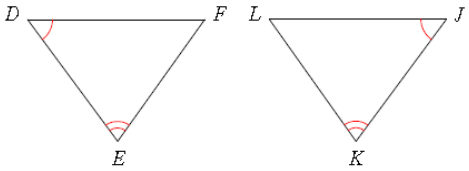
26. SSS



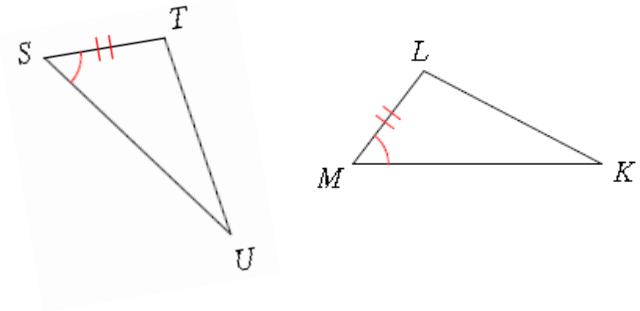
27. SAS



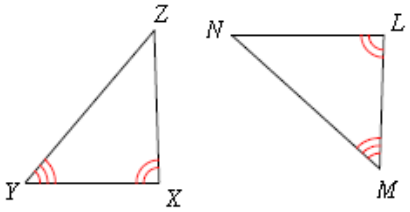
28. ASA



29. ASA



30. AAS



Work these on another sheet of paper

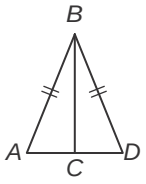
SHOW YOUR WORK

Page 309-311: #'s 11-15, 17-20, 22, 26-27, 31-33

Page 313: #'s 1-9, 11, 13-16, 18-19

31. **Complete the two column proof:**

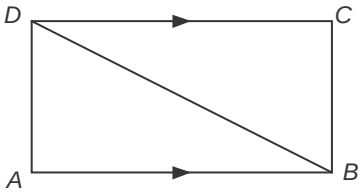
Given: $\overline{AB} \cong \overline{DB}$ and C is the midpoint of $\overline{AD}$
Prove: $\triangle ABC \cong \triangle DBC$



Statements	Reasons
1. $\overline{AB} \cong \overline{DB}$	**1.** Given
2. C is the midpoint of $\overline{AD}$	**2.** Given
3. $\overline{AC} \cong \overline{DC}$	**3.**
4.	**4.** Reflexive Property of $\cong$
5. $\triangle ABC \cong \triangle DBC$	**5.**

32. **Complete the two column proof:**

Given: $\overline{AB} \parallel \overline{CD}$
$\angle CBD \cong \angle ADB$
Prove: $\Delta ABD \cong \Delta CDB$



Statements	Reasons
1. $\overline{AB} \parallel \overline{CD}$	**1.** Given
2	**2.**
3. $\angle ABD \cong \angle BDC$	**3.**
4. $\overline{BD} \cong \overline{BD}$	**4.** Reflexive Property of Congruence
5. $\Delta ABD \cong \Delta CDB$	**5.**