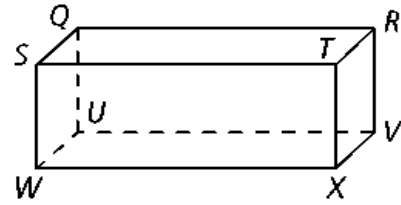


Name _____ Period _____

3.1-3.3 Review Worksheet

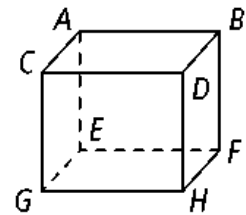
Use the diagram at right to name each of the following.

1. Name a pair of parallel planes.
2. Name all lines that are parallel to \overleftrightarrow{RV} .
3. Name four lines that are skew to \overleftrightarrow{WX} .
4. Name a plane parallel to plane QUW .



In problems 5-10, determine if the statement is true or false using the cube below. If it is false, explain why.

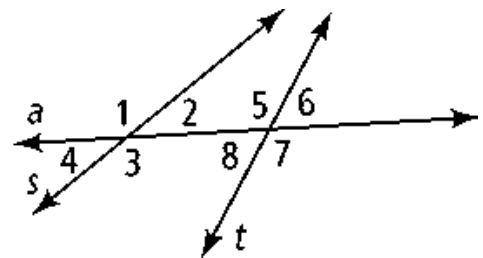
5. \overleftrightarrow{AE} and \overleftrightarrow{EF} are skew lines.
6. $\text{plane } DBF \parallel \text{plane } ABD$
7. $\overleftrightarrow{GH} \parallel \overleftrightarrow{EF}$
8. $\overleftrightarrow{DB} \parallel \overleftrightarrow{AE}$
9. $\text{plane } EFH \parallel \text{plane } ABD$
10. \overleftrightarrow{FH} and \overleftrightarrow{CD} are skew lines.



11. You are driving over a bridge that runs east and west. Below the bridge, a highway runs north and south. Are the bridge and the highway *parallel*, *skew*, or *neither*? Explain.
12. Your friend says that the sides of a ladder and the rungs are skew. Is this true? Explain.

Identify all pairs of each type of angle in the figure at right.

13. Corresponding Angles
14. Consecutive Interior Angles
15. Alternate Interior Angles
16. Alternate Exterior Angles



Determine the type of angle pair given using the figure at right.

17. $\angle 2$ and $\angle 7$

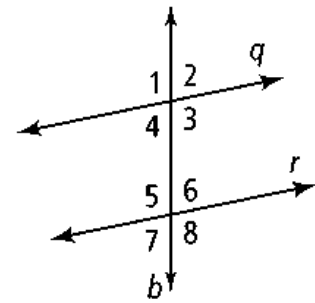
18. $\angle 5$ and $\angle 4$

19. $\angle 8$ and $\angle 3$

20. $\angle 2$ and $\angle 4$

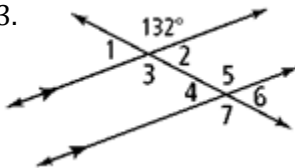
21. $\angle 6$ and $\angle 4$

22. $\angle 7$ and $\angle 8$

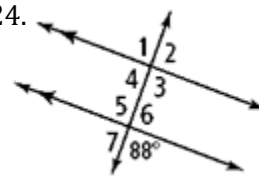


Identify all the numbered angles that are congruent to the given angle. Justify your answers.

23.

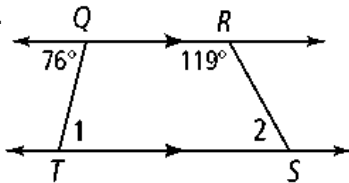


24.

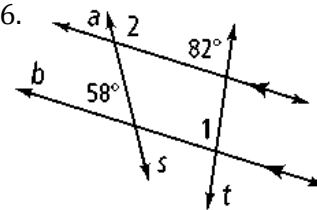


Find the $m\angle 1$ and $m\angle 2$. Justify each answer.

25.

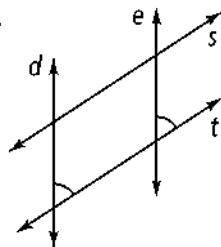


26.

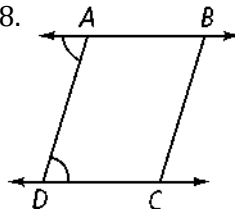


Which lines or segments are parallel in the following figures? Justify your answer.

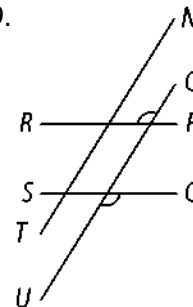
27.



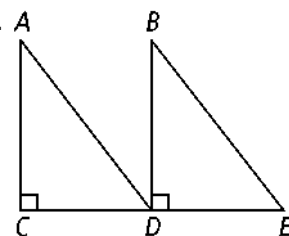
28.



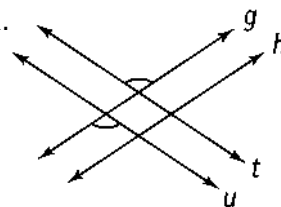
29.



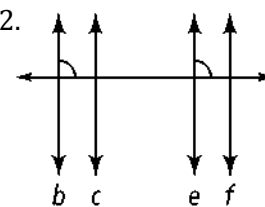
30.



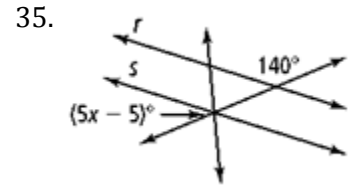
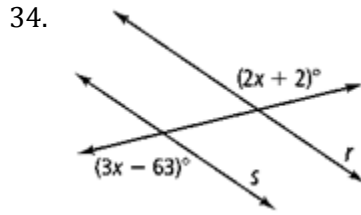
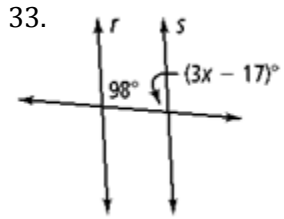
31.



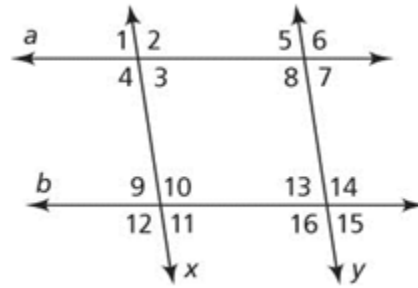
32.



Determine the value of x for which $r \parallel s$. Then find the measure of each labeled angle.



36. **Given:** $a \parallel b, x \parallel y$
Prove: $\angle 4$ is supplementary to $\angle 15$



37. **Given:** $a \parallel c, b \parallel c$, and $m\angle 2 = 65^\circ$
Prove: $m\angle 1 = 65^\circ$

