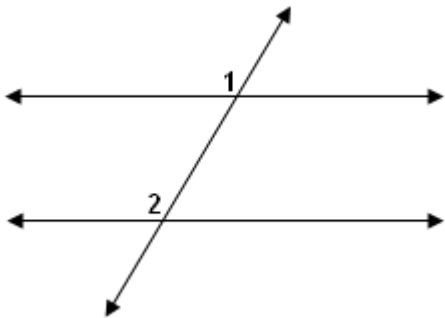


Student Name: _____

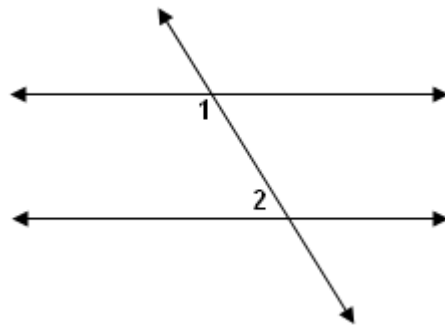
Score: _____

Relationship of Angles Worksheet

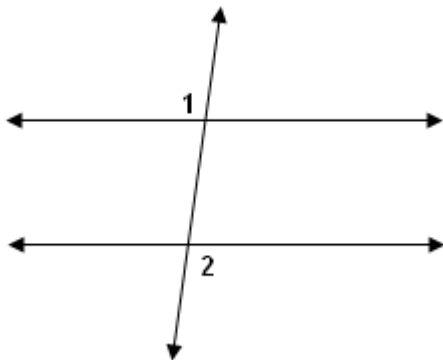
Write the relationship of angle 1 and 2 in each case: Corresponding, alternate interior, alternate exterior or co-interior.



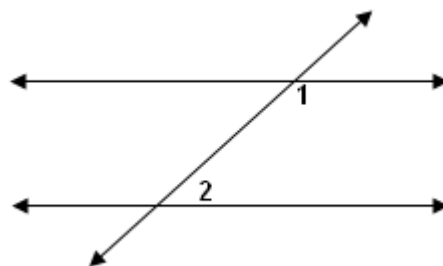
Answer: _____



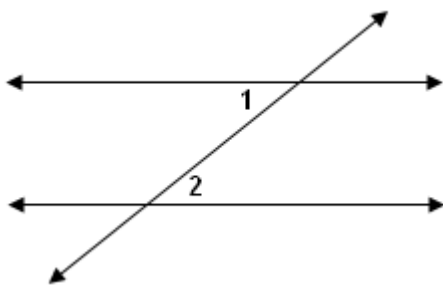
Answer: _____



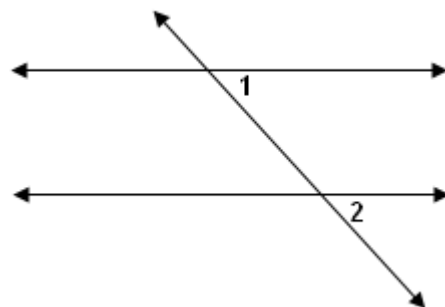
Answer: _____



Answer: _____



Answer: _____

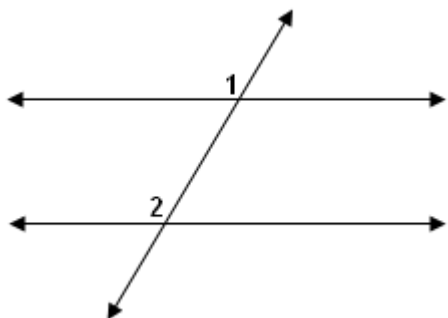


Answer: _____

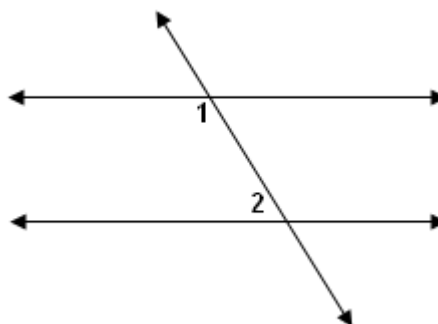
Student Name: _____

Score: _____

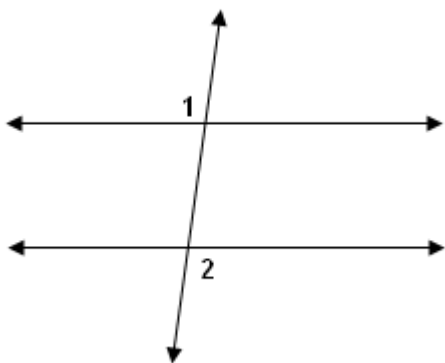
Answers



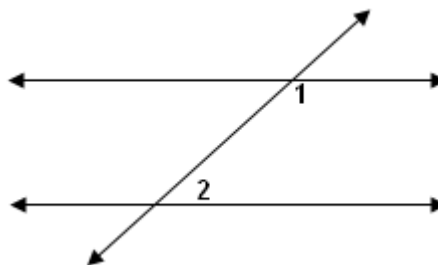
Answer: **Corresponding angles**



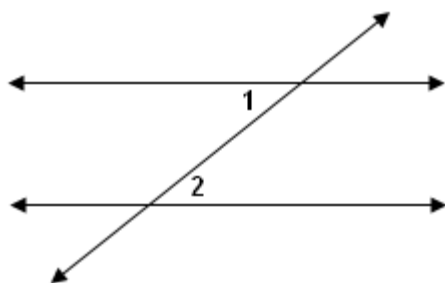
Answer: **Co-interior angles**



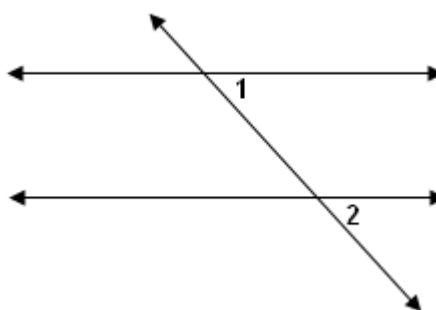
Answer: **Alternate exterior angles**



Answer: **Co-interior angles**



Answer: **Alternate interior angles**



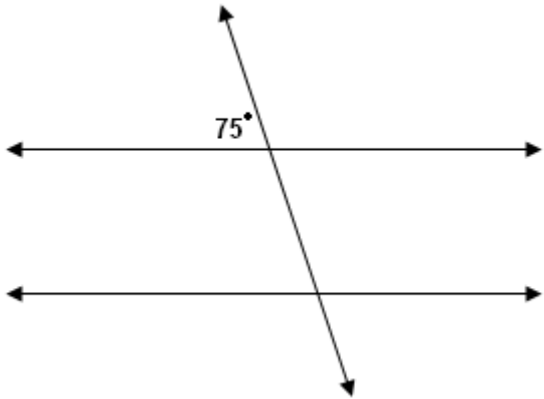
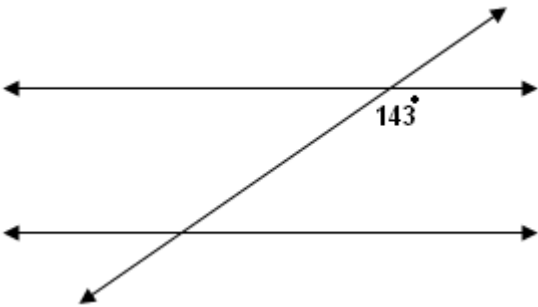
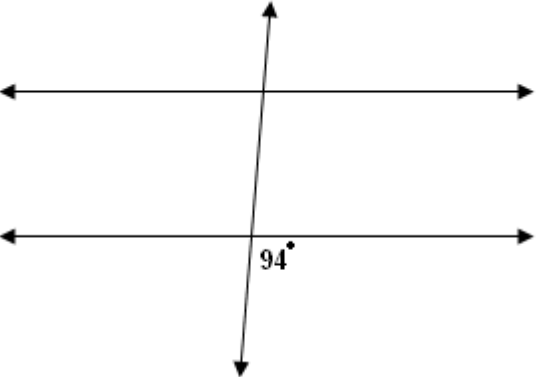
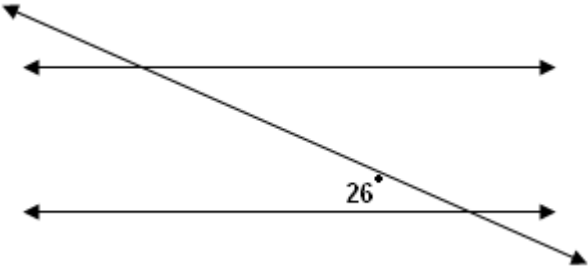
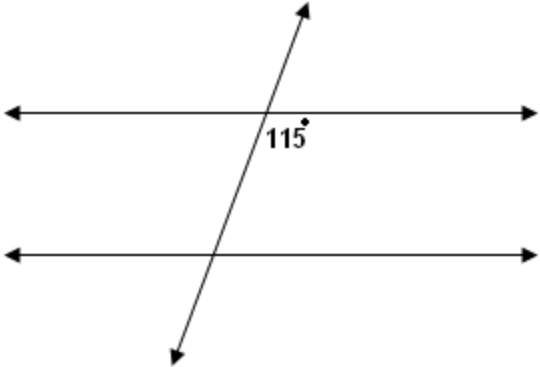
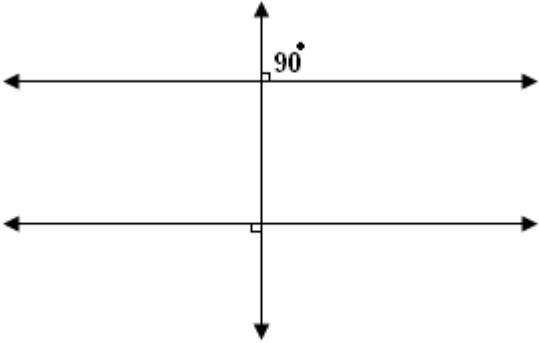
Answer: **Corresponding angles**

Student Name: _____

Score: _____

Parallel Lines and Transversals Worksheet

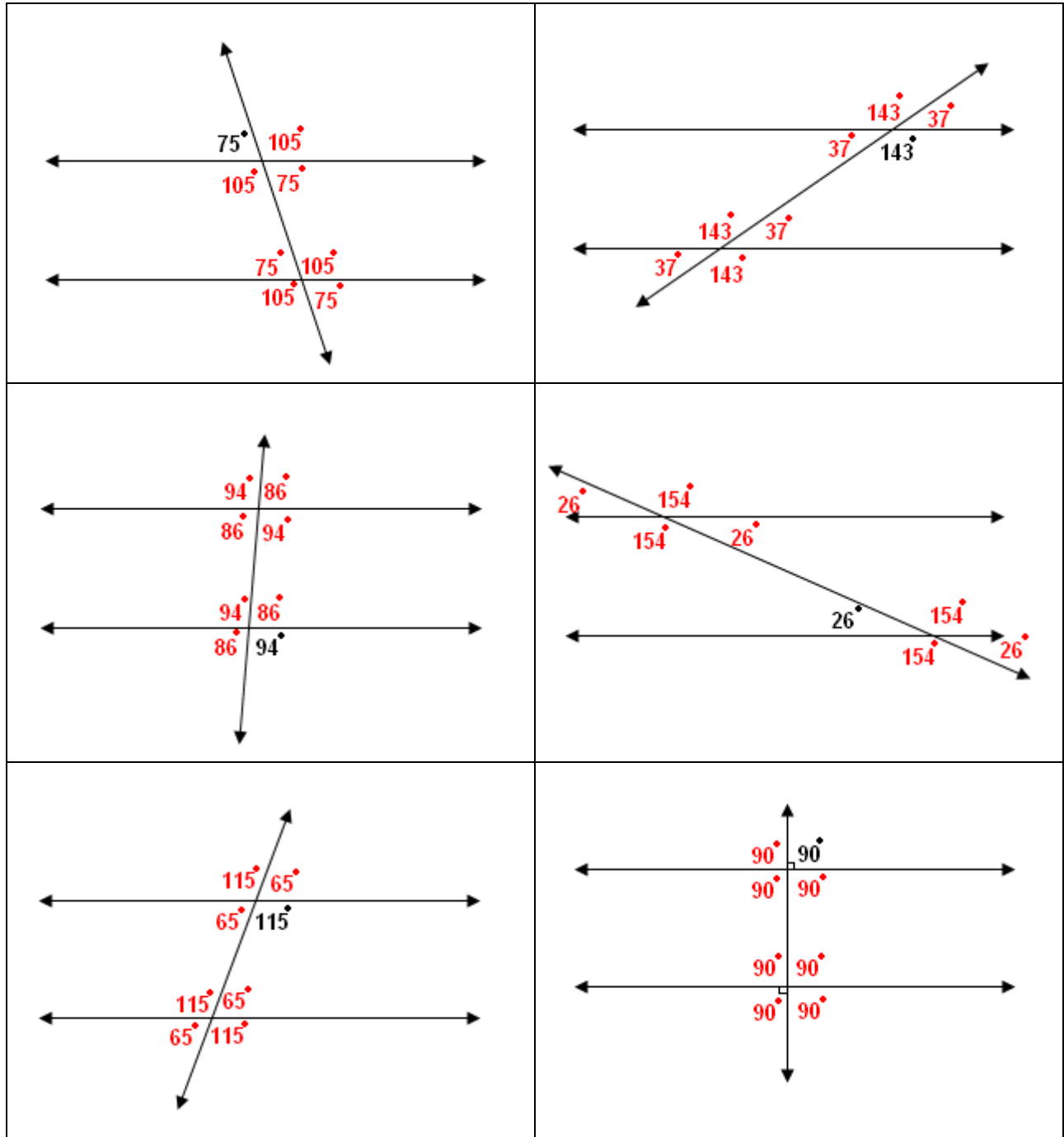
Write all the angles from the given angle:

Student Name: _____

Score: _____

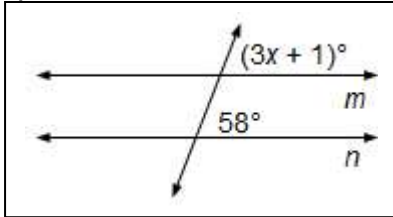
Answers



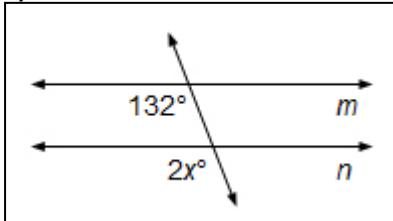
Name: _____ Period: _____ Date: _____

Use the diagrams below, state the properties of parallel line and write an equation, then solve the x .

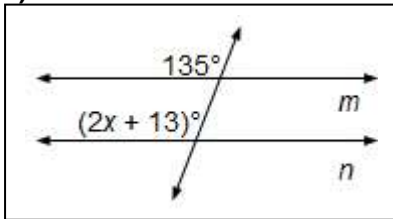
1) Find the value of x that makes $m \parallel n$.



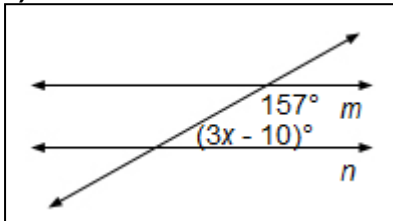
2) Find the value of x that makes $m \parallel n$.



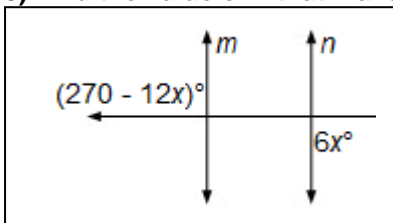
3) Find the value of x that makes $m \parallel n$.



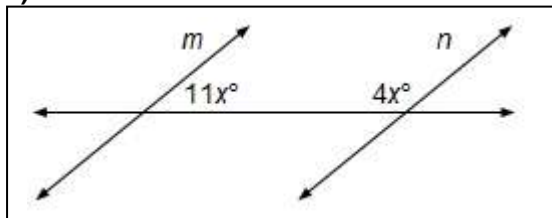
4) Find the value of x that makes $m \parallel n$.



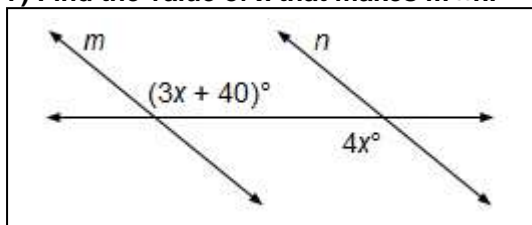
5) Find the value of x that makes $m \parallel n$.



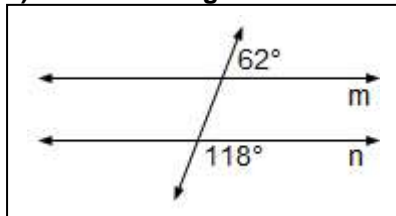
6) Find the value of x that makes $m \parallel n$.



7) Find the value of x that makes $m \parallel n$.

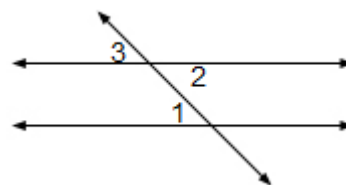


8) Is there enough information in the diagram to conclude that $m \parallel n$?



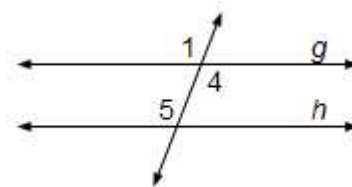
9. Prove that if two parallel lines are cut by a transversal, then the pairs of alternate interior angles are congruent.

Statements	Reasons
1. $p \parallel q$	1 Given
2. $\angle 1 \cong \angle 3$	2. Corresponding angles Postulate
3. $\angle 3 \cong \angle 2$	3. Vertical angles Congruence Theorem
4. $\angle 1 \cong \angle 2$	4. Transitive Property of Congruence



10. Prove that if two lines are cut by a transversal so the alternate interior angles are congruent, then the lines are parallel.

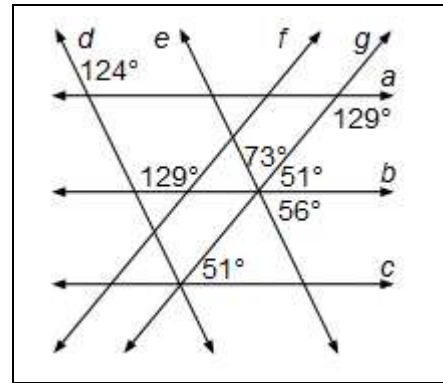
GIVEN: $\angle 4 \cong \angle 5$ PROVE: $g \parallel h$



Statements	Reasons
1)	1) Given
2)	2) <u>?</u>
3)	3) <u>?</u>
4)	4) <u>?</u>
5)	5) <u>?</u>

11. Use the diagram below in the following exercise.
How would you show that the lines b and c are parallel?

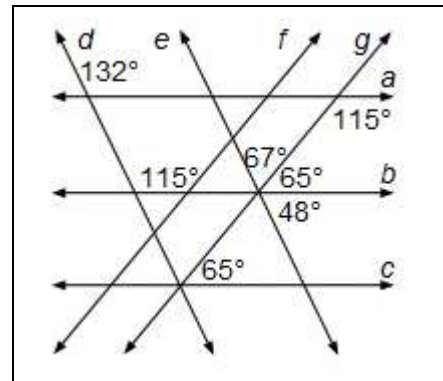
- A. Use the Consecutive Interior Angles Converse Theorem.
- B. Use the Alternate Exterior Angles Converse Theorem.
- C. Use the Alternate Interior Angles Converse Theorem.
- D. Use the Corresponding Angles Converse Postulate.



12. Use the diagram below in the following exercise.

How would you show that the lines a and b are parallel?

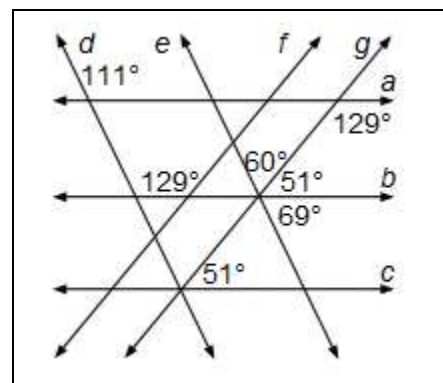
- A. Use the Corresponding Angles Converse Postulate.
- B. Use the Alternate Exterior Angles Converse Theorem.
- C. Use the Consecutive Interior Angles Converse Theorem.
- D. Use the Alternate Interior Angles Converse Theorem.



13. Use the diagram below in the following exercise.

How would you show that the lines b and c are parallel?

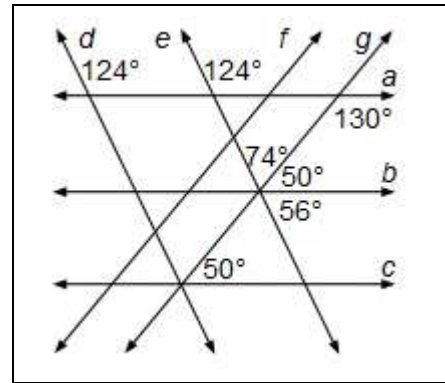
- A. Use the Consecutive Interior Angles Converse Theorem.
- B. Use the Alternate Exterior Angles Converse Theorem.
- C. Use the Alternate Interior Angles Converse Theorem.
- D. Use the Corresponding Angles Converse Postulate.



14. Use the diagram below in the following exercise.

How would you show that the lines d and e are parallel?

- A. Use the Alternate Exterior Angles Converse Theorem.
- B. Use the Consecutive Interior Angles Converse Theorem.
- C. Use the Corresponding Angles Converse Postulate.
- D. Use the Alternate Interior Angles Converse Theorem.



15. Use the diagram below in the following exercise.

How would you show that the lines f and g are parallel?

- A. Use the Corresponding Angles Converse Postulate.
- B. Use the Vertical Angles Congruence Theorem followed by the Alternate Exterior Angles Converse Theorem.
- C. Use the Vertical Angles Congruence Theorem followed by the Consecutive Interior Angles Converse Theorem.
- D. Use the Vertical Angles Congruence Theorem followed by the Alternate Interior Angles Converse Theorem.

