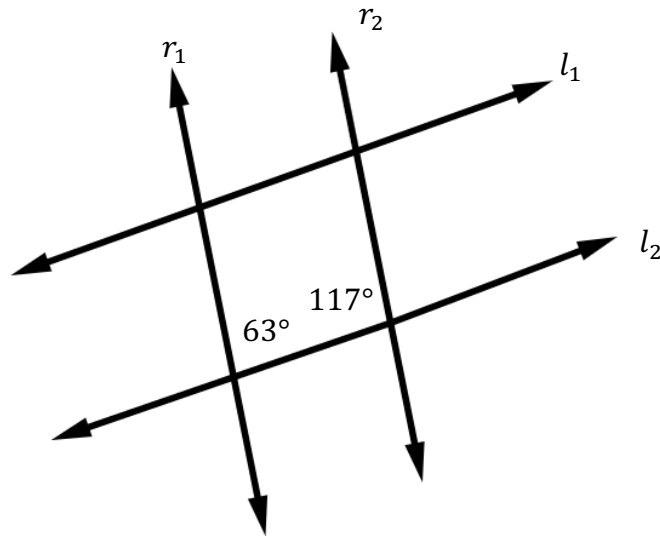


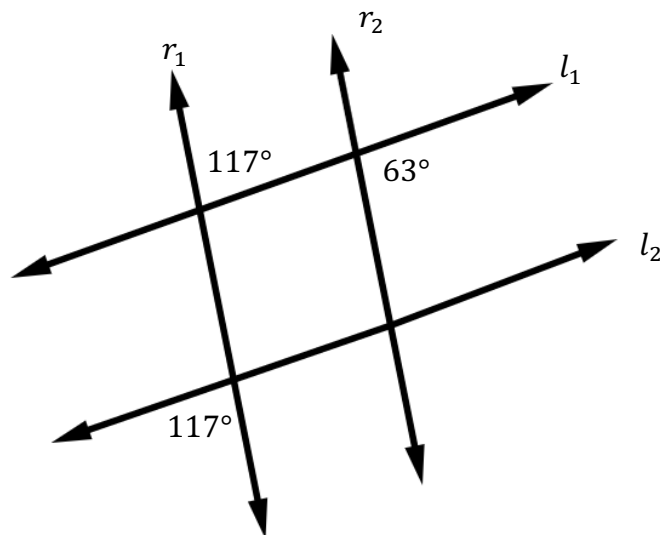
Angles**Special Types of Angle Pairs Formed by Transversals and Parallel Lines – Part 1
Independent Practice**

1. Consider the figure below.



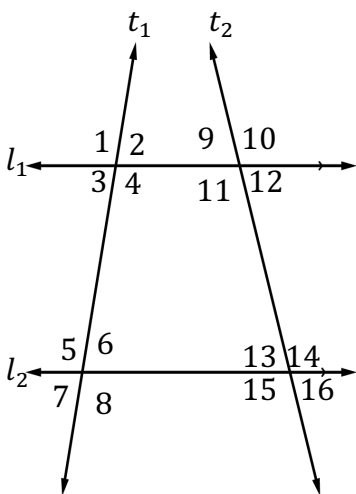
Which lines of the following segments are parallel? Justify your answer.

2. Consider the figure below.



Which lines of the following segments are parallel? Justify your answer.

3. Consider the figure below, where l_1 and l_2 are parallel and cut by transversals t_1 and t_2 .



Part A: What is the relationship between $\angle 1$ and $\angle 3$? Justify your answer.

Part B: What is the relationship between $\angle 2$ and $\angle 7$? Justify your answer.

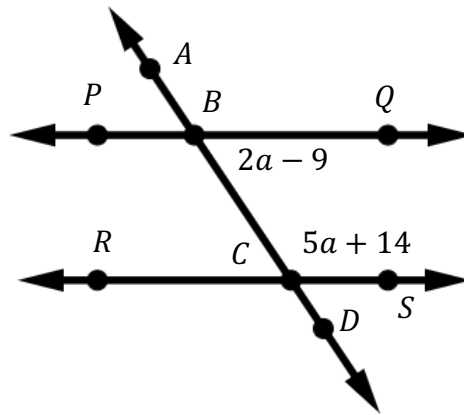
Part C: What is the relationship between $\angle 4$ and $\angle 6$? Justify your answer.

Part D: What is the relationship between $\angle 11$ and $\angle 15$? Justify your answer.

Part E: What is the relationship between $\angle 12$ and $\angle 13$? Justify your answer.

Part F: What is the relationship between $\angle 14$ and $\angle 15$? Justify your answer.

4. Consider the figure below.



Part A: Solve for a and justify your answer.

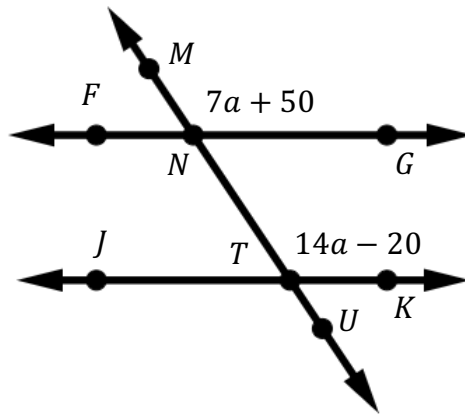
Part B: Determine $m\angle ABQ$.

Part C: Determine $m\angle BCR$.

5. Write the converse of the statement below. Then determine whether the statement is true or false. If false, give a counterexample.

Conditional Statement: *If two angles are corresponding, then they are congruent.*

6. Consider the figure below.



Part A: Solve for a and justify your answer.

Part B: Determine $m\angle FNT$.

Part C: Determine $m\angle KTU$.

7. Consider the following conditional statement: *If two angles are supplementary, then they are formed by two parallel lines cut by a transversal.* Which of the following is a counterexample to this statement?

