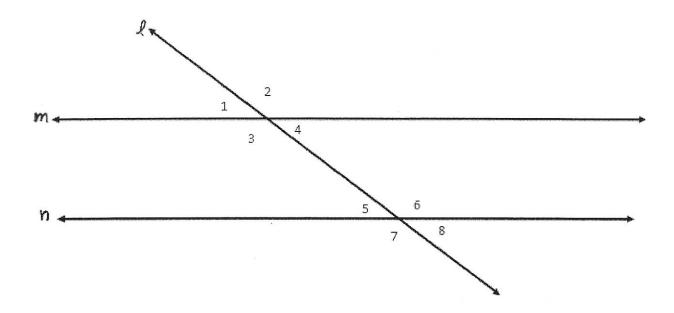
Activity #1

Instruction: Place the patty paper on top of the picture below and trace angle \angle 1.To answer the questions below rotate the patty paper and place the angle you trace on top of other angles to find matching angles.



1. List all the angles that are congruent to angle \angle 1.

2. What angle did you discover to be congruent to angle $\angle 1$ when transversal *l* intersects line *m*?

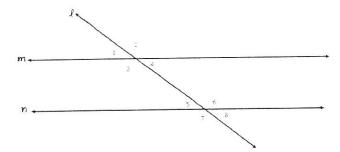
3. The pairs of angle found in problem 2 have a special name. What are these angles called?

On the patty paper trace \angle 2. Remember to rotate your trace to find matching angles.

- 4. Find all the angles that are congruent to angle \angle 2.
- 5. What angle did you discover to be congruent to angle $\angle 2$ when transversal l intersects line n?

6. What do you notice about the angles found on question #5?

- 7. What are vertical angles?
- 8. Use the picture below to list all pairs of vertical angles.



Activity #2

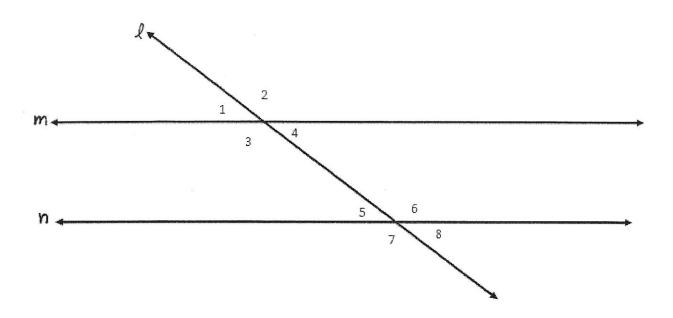
Part 1

Instructions:

On the picture below, using any colored pencil or highlighter, highlight parallel lines m and n.

Next, place the patty paper on top of the picture and trace angle 3.

To answer the questions below rotate the patty paper and place the angle you trace on top of other angles to find matching angles.



- 1. Focusing on the angles located *between* parallel lines m and n, find the angle congruent to angle 3. Then color both angles with the same color.
- 2. Trace angle 4 on the patty paper. Focusing on the angles located **between** parallel lines m and n, find the angle congruent to angle 4. Use a different colored pencil than you did for question 1 and color both angles with the same color.

hint: Remember to rotate your patty paper to find matching angles.

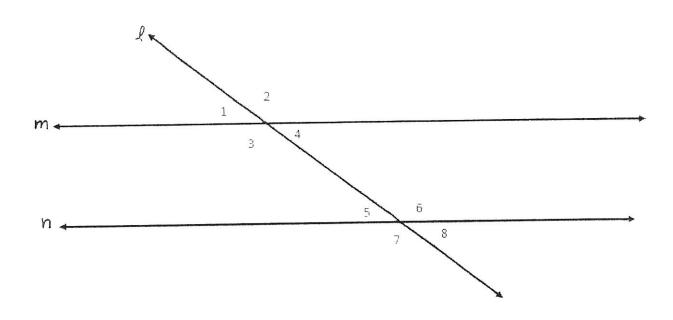
3. The pairs of congruent angles found in problems 1 and 2 have a special name. What are these angles called?

Instructions:

On the picture below, using any colored pencil or highlighter, highlight parallel lines m and n.

Next, place the patty paper on top of the picture and trace angle 1.

To answer the questions below rotate the patty paper and place the angle you trace on top of other angles to find matching angles.



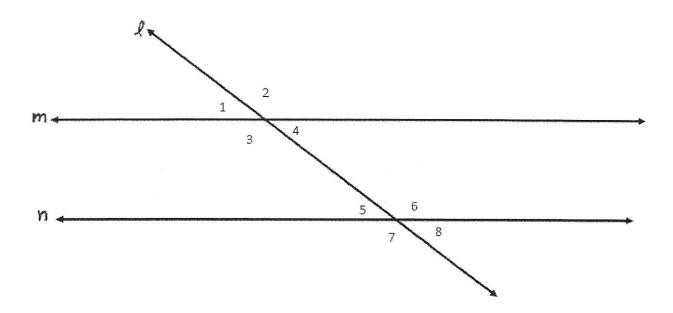
4. Focusing on the angles located on the *outside* of parallel lines m and n, find the angle congruent to angle 1. Then color both angles with the same color.

5. Trace angle 2 on the patty paper. Focusing on the angles located on the *outside* of parallel lines *m* and *n*, find the angle congruent to angle 2. Use a different colored pencil and color both angles with the same color. *hint: Remember to rotate your patty paper to find matching angles*.

6. The pairs of congruent angles found in problems 4 and 5 have a special name. What are these angles called?

Activity #3

Instruction: On the picture below, using any colored pencil or highlighter, highlight *transversal l.* Next, place the patty paper on top of the picture and trace angle 1.To answer the questions below slide the patty paper along *transversal l* to find matching angles.



- 1. Focusing on the angles located at the **left** side of *transversal l*, find the angle congruent to angle 1. Then color both angles with the same color.
- 2. Trace angle 3 on the patty paper and focusing only on angles located at the *left* side of *transversal l*, find the angle congruent to angle 3. Use a different colored pencil and color both angles with the same color.

hint: Remember to slide your patty paper along transversal l to find matching angles.

3. Trace angle 2 on the patty paper and focusing only on angles located at the *right* side of *transversal l*, find the angle congruent to angle 2. Use a different colored pencil and color both angles with the same color.

hint: Remember to slide your patty paper along transversal l to find matching angles.

4. Trace angle 4 on the patty paper and focusing only on angles located at the *right* side of *transversal l*. find the angle congruent to angle 4. Use a different colored pencil and color both angles with the same color.

hint: Remember to slide your patty paper along transversal l to find matching angles.

- 5. The pairs of congruent angles found in problems 1, 2, 3 and 4 have a special name. What are these angles called?
- 6. Use the picture below and list all corresponding angles.

