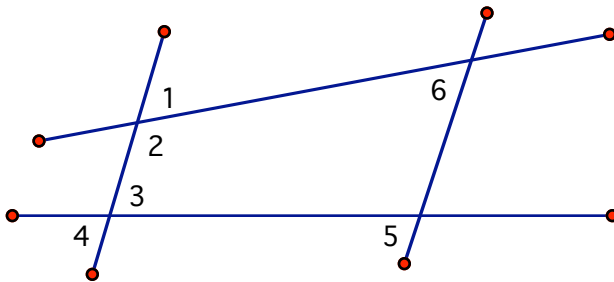


**Geometry Test 6 Mr. Holcomb 2008/2009**  
**Best Thanksgiving food:**

**Multiple Choice**

*Identify the choice that best completes the statement or answers the question.*

**Use the diagram below to answer the questions that follow.**



- \_\_\_\_\_ 1. (2 points)  $\angle 1$  and  $\angle 2$  are examples of
- |                              |                              |
|------------------------------|------------------------------|
| a. alternate interior angles | d. vertical angles           |
| b. same side interior angles | e. alternate exterior angles |
| c. corresponding angles      | f. a linear pair of angles   |
- \_\_\_\_\_ 2. (2 points)  $\angle 2$  and  $\angle 3$  are examples of
- |                              |                              |
|------------------------------|------------------------------|
| a. corresponding angles      | d. same side interior angles |
| b. alternate interior angles | e. vertical angles           |
| c. alternate exterior angles | f. a linear pair of angles   |
- \_\_\_\_\_ 3. (2 points)  $\angle 3$  and  $\angle 4$  are examples of
- |                              |                              |
|------------------------------|------------------------------|
| a. vertical angles           | d. alternate exterior angles |
| b. same side interior angles | e. corresponding angles      |
| c. alternate interior angles | f. a linear pair of angles   |
- \_\_\_\_\_ 4. (2 points)  $\angle 4$  and  $\angle 5$  are examples of
- |                              |                              |
|------------------------------|------------------------------|
| a. alternate interior angles | d. a linear pair of angles   |
| b. corresponding angles      | e. same side interior angles |
| c. vertical angles           | f. alternate exterior angles |
- \_\_\_\_\_ 5. (2 points)  $\angle 1$  and  $\angle 6$  are examples of
- |                              |                              |
|------------------------------|------------------------------|
| a. same side interior angles | d. corresponding angles      |
| b. vertical angles           | e. a linear pair of angles   |
| c. alternate interior angles | f. alternate exterior angles |
- \_\_\_\_\_ 6. (1 point)  $\angle 1$  and  $\angle 4$  are examples of
- |                              |                              |
|------------------------------|------------------------------|
| a. vertical angles           | d. alternate exterior angles |
| b. a linear pair of angles   | e. corresponding angles      |
| c. same side interior angles | f. alternate interior angles |

**Problem**

7. (12 points) Create symbols to represent each conditional statement below. Then create a syllogism using the symbols. Finally, write the conclusion in words.

If you save your money, then you will be able to go to the movies.

If you can't see the sun, then you do not need sun glasses.

If the sky is cloudy, then you can't see the sun.

If you don't need sunglasses, then you can save your money.

.

8. (12 points) Create symbols to represent each conditional statement below. Then create a syllogism using the symbols. Finally, write the conclusion in words.

If an animal does not like cookies, then it does not like bananas.

Animals have fur only if they like cookies.

All monkeys like bananas.

.

9. (12 points) Create symbols to represent each conditional statement below. Then create a syllogism using the symbols. Finally, write the conclusion in words.

All cats are cookies.

Something is a donut only if it is a cookie.

If an animal is not a cat, then it is a ball.

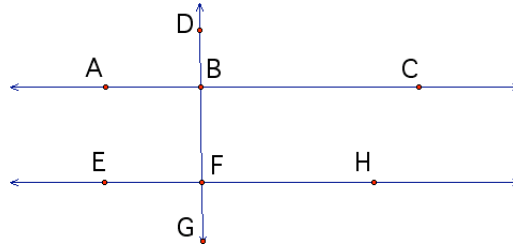
No ball is a pickle.

.

10. (15 points) Complete the following proof. You can add additional lines to the table, or not use them all.

Given:  $\angle GFH$  is a right angle,  $\overleftrightarrow{AC} \parallel \overleftrightarrow{EH}$

Prove:  $\angle ABD$  is a right angle.



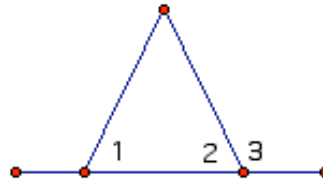
Plan:

Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.

11. (15 points) Complete the following proof. You can add additional lines to the table, or not use them all.

Given:  $\angle 1$  and  $\angle 3$  are supplementary.

Prove:  $m\angle 1 = m\angle 2$



Plan:

Statements	Reasons
1.	1.
2.	2.
3.	3.
4.	4.
5.	5.
6.	6.
7.	7.
8.	8.