





SCIENTIFIC METHOD

FLOW CHART

Most of us use a loose form of the scientific method to solve everyday problems. For each of the problems and observations below, develop a hypothesis to explain what's happening. Then describe how you might test your theory with a simple experiment.

|  PROBLEM ▶ |  OBSERVATION ▶ |  HYPOTHESIS ▶ |  EXPERIMENT |
|--|--|--|--|
| <p>Your cat rejects a can of tuna cat food.</p> | <p>She ate the can of chicken flavored food you fed her last night, and the beef food from the night before.</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> |
| <p>Your bedroom air conditioner blows very cold air at night, but only cool air during the day.</p> | <p>Your bedroom gets lots of direct sunlight all day long.</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> |
| <p>You're talking on your cell phone in your bedroom, when suddenly the reception goes d for a minute.</p> | <p>Just before the reception clears up, you hear the microwave beep in the kitchen.</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> | <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> |

SCIENTIFIC METHOD

ORDER OF EVENTS



Unscramble the letters to identify which step of the scientific method each statement represents. Then number the statements in chronological order, 1-7.

..... We bought a block of unsliced cheese on the same day, and it isn't moldy at all.

ITVBARNOESO

..... I think that sliced cheese gets moldy faster because people touch it more.

PSHEYTSHIO

..... After five days, both sets of cheese that I touched are moldy. Both sets of cheese that I left alone have no mold.

SRUETL

..... I keep four separate sets of cheese in the refrigerator: five slices that I touch once a day; five slices that I leave untouched; five cubes of unsliced cheese that I touch once a day; and five cubes that I leave untouched.

MRETEPXNIE

..... Why is the sliced cheese in the fridge all moldy?

BEMOPLR

..... I was right: Touching is the critical factor in making cheese mold.

LNCSUOICNO

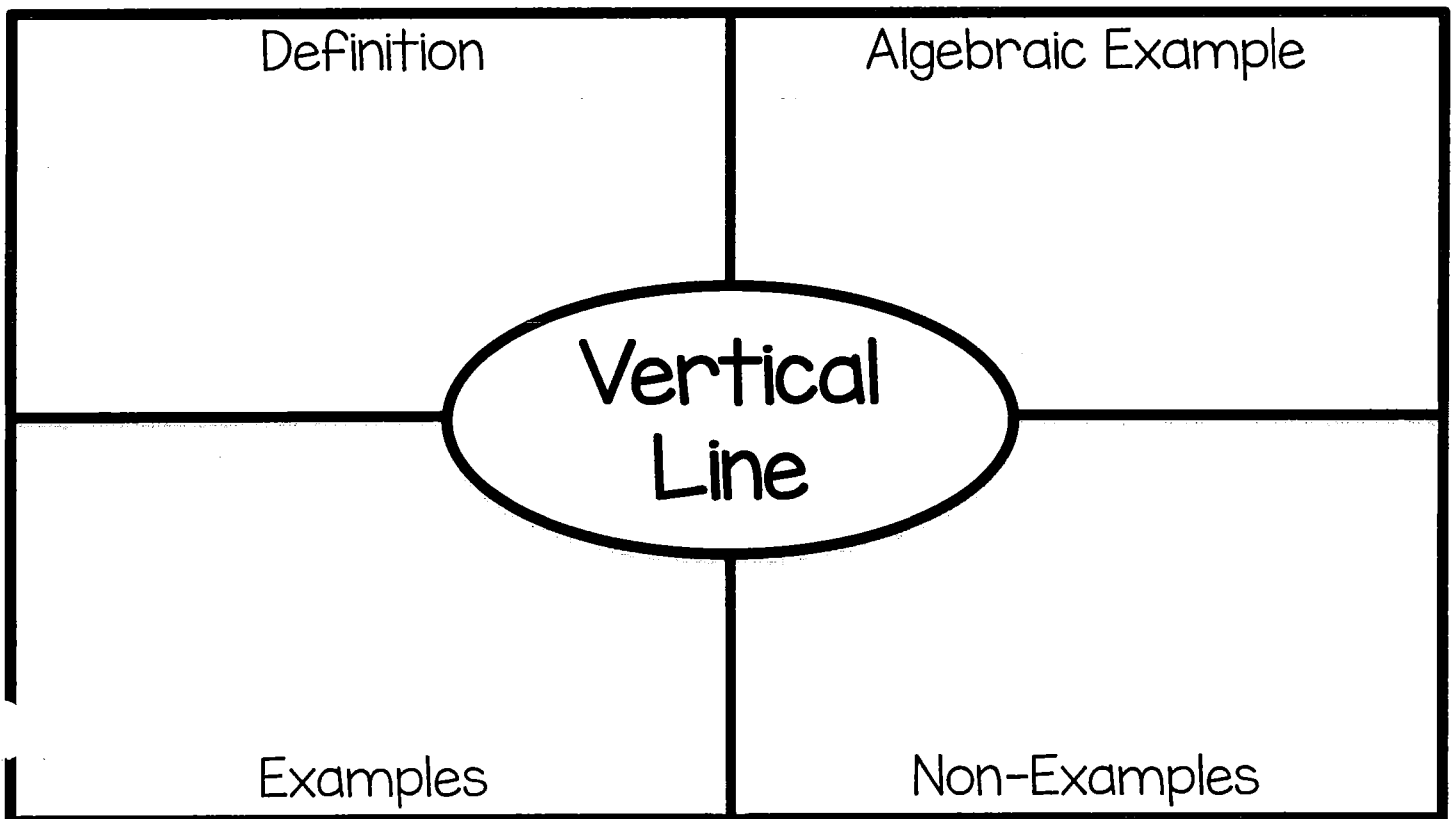
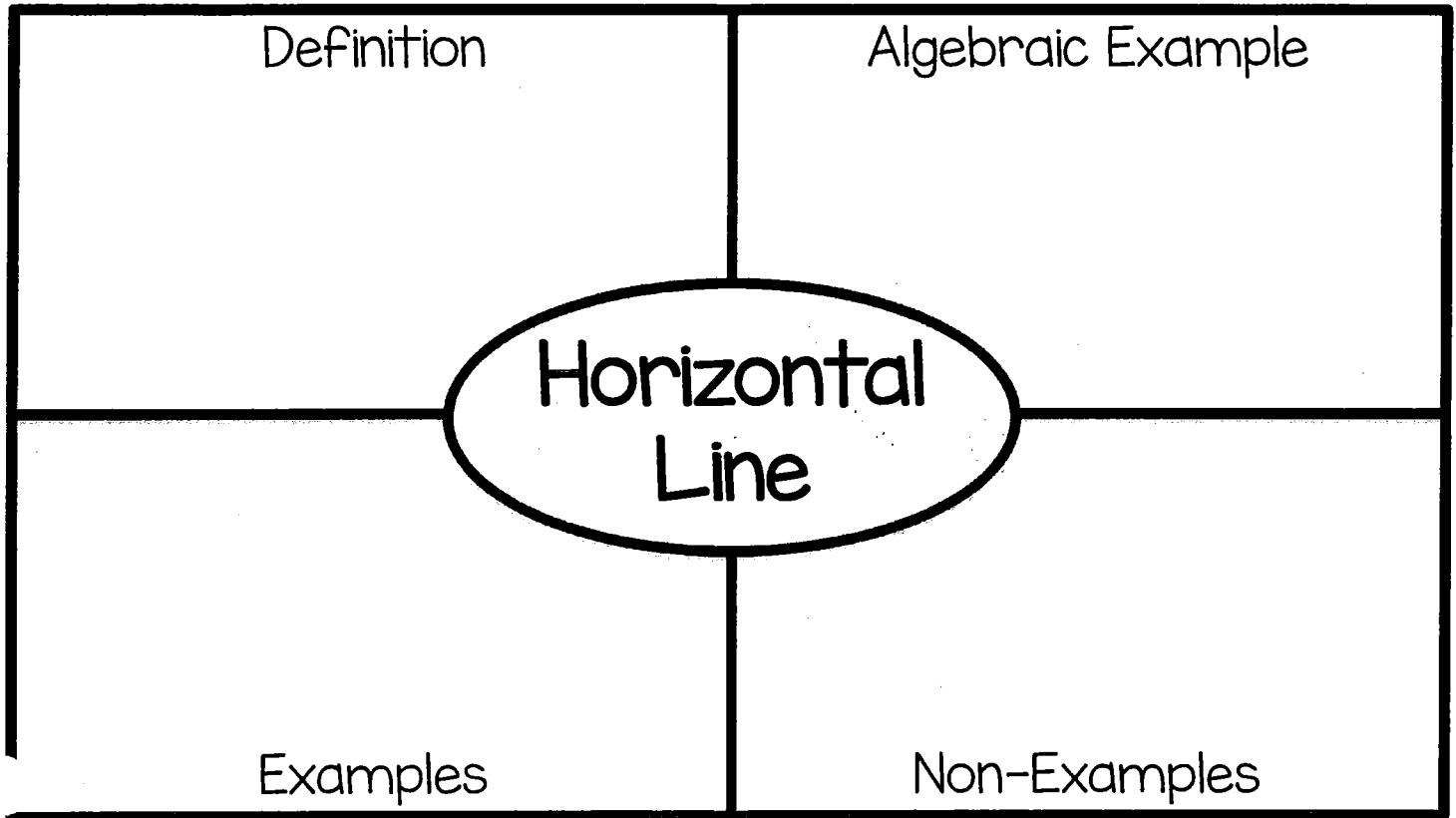
..... There must be something about sliced cheese that makes it more likely to mold.

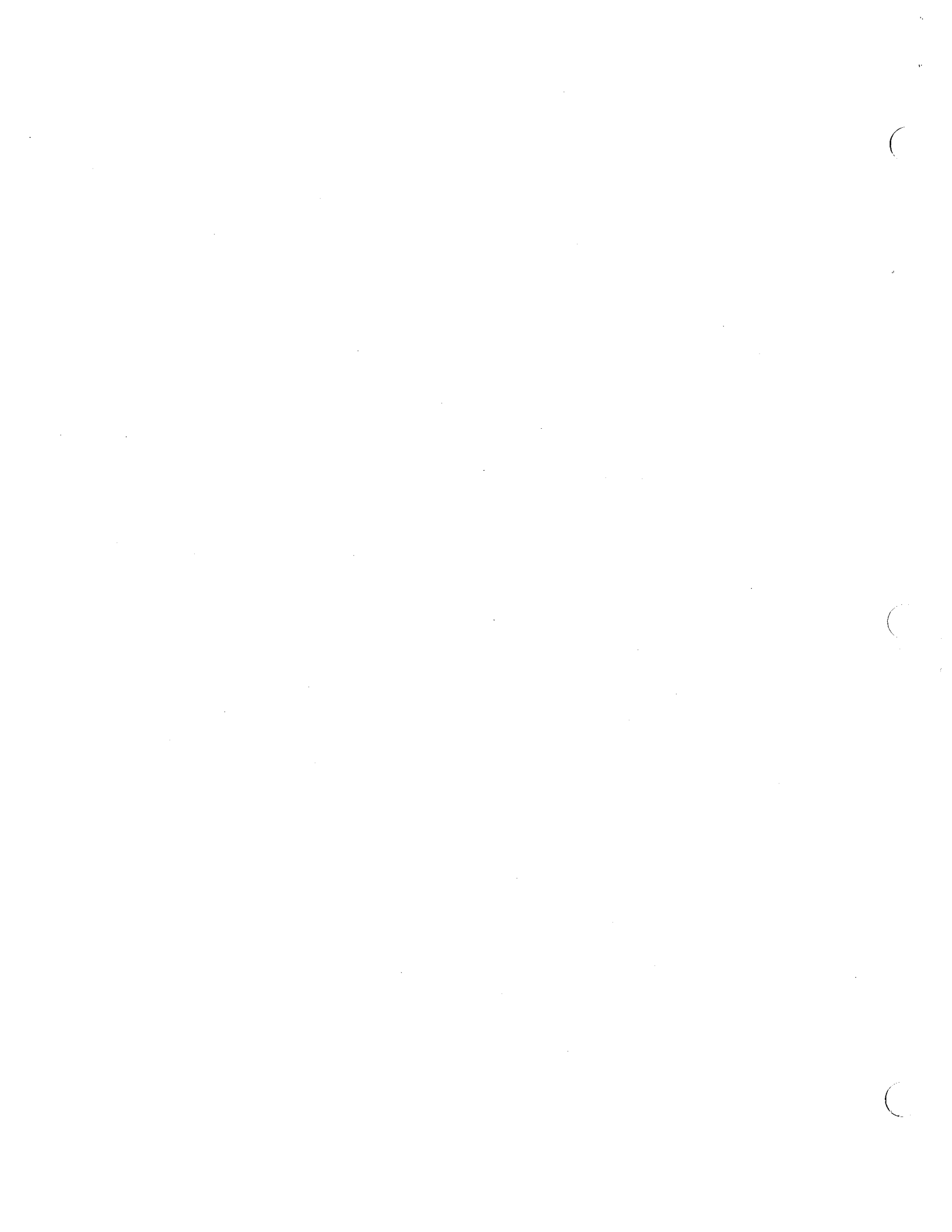
ECRFENINE

Name: _____

Date: _____

Distance in the Coordinate Plane Vocabulary





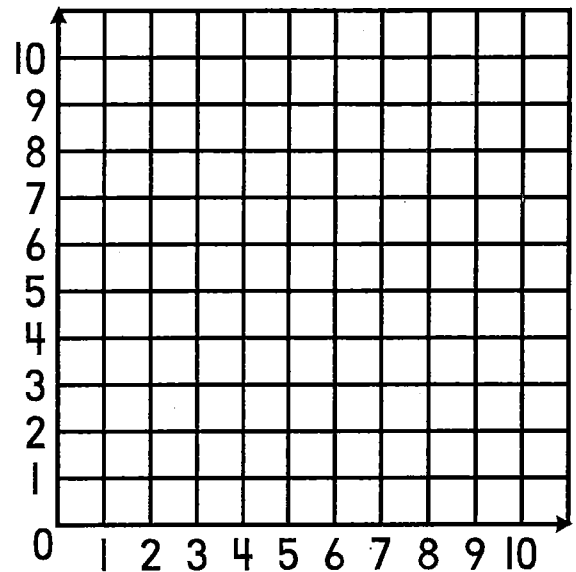
Name: _____

Date: _____

Distance in the Coordinate Plane

1. Points are located in reference to the _____ and the _____.
2. Ordered pairs are always named (_____, _____)
3. It is possible to find the _____ of a horizontal or vertical line drawn in a coordinate plane.
4. One way you can find the length is by plotting points, drawing the line and _____ to find the length.
5. You can find the length of any vertical or horizontal line in the coordinate plane by using the coordinates of the _____.
6. The endpoints of horizontal lines have the same _____ and different x-coordinates.
7. To find the distance between the endpoints of a horizontal line, subtract the _____.
8. The endpoints of vertical lines have the same _____ and different y-coordinates.
9. To find the distance between the endpoints of a vertical line, subtract the _____.
10. Find the length of each line using subtraction. Then plot the points on the graph and check by counting.

| Endpoints | Work | Length |
|-------------|------|--------|
| (4,3) (4,8) | | |
| (2,1) (9,1) | | |



1. You can find _____ and _____ of polygons by finding the length of sides of a polygon in a coordinate plane.



Name: _____

Date: _____

Practice: Distance in the Coordinate Plane

#1 Find the length of a line with the following endpoints: **A (0,4) B (0,9)**

#2 Find the length of a line with the following endpoints: **C (4,10) D (10,10)**

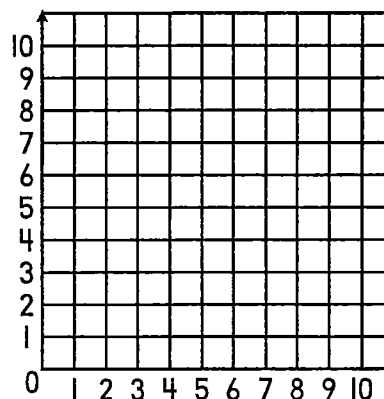
#3 Find the length of a line with the following endpoints: **E (3,5) F (2,5)**

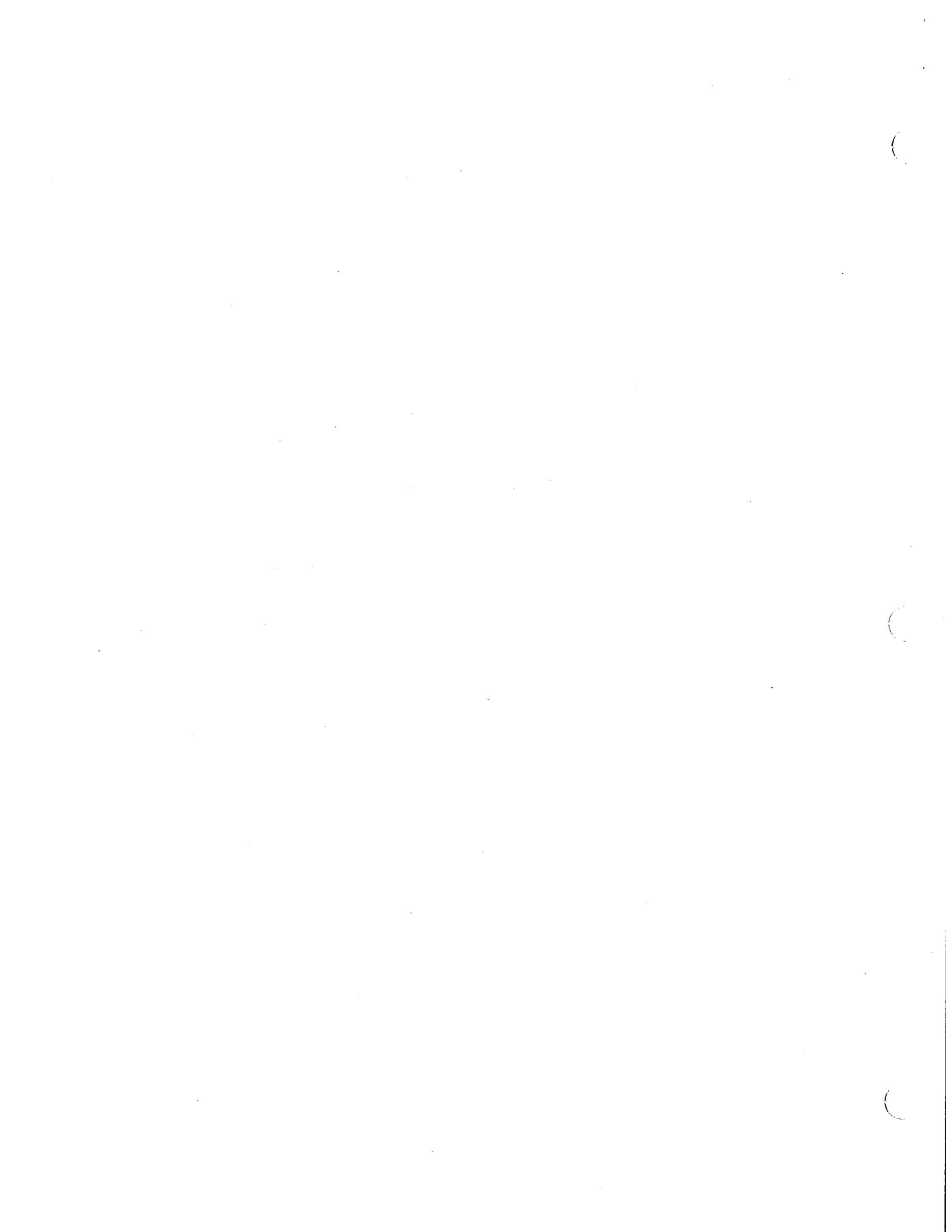
#4 Find the length of a line with the following endpoints: **G (2,9) H (2,1)**

#5 Find the perimeter of a rectangle with the following vertices: **A (1,1) B (1,6) C (4,6) D(4,1)**

#6 Find the area of a triangle whose base goes from point (6,1) to (10,1). The endpoints of the height are (6,1) and (6,7)

#7 Find the perimeter and area of the rectangle with the following vertices: **K (0,5) L (0,10) M(7,10) N(7,5)** Then, plot the points on the grid and count to check,





Distance Between Points

EQ: _____

Use the map to write the coordinates of each location.

| | | | | | |
|-------------|---------------|----------------|--------------|----------------|--------------|
| Carousel | Bumper Cars | Roller Coaster | Parking Lot | Submarine Ride | Restrooms |
| Petting Zoo | Haunted House | Swings | Pizza Parlor | Teacups | Ferris Wheel |

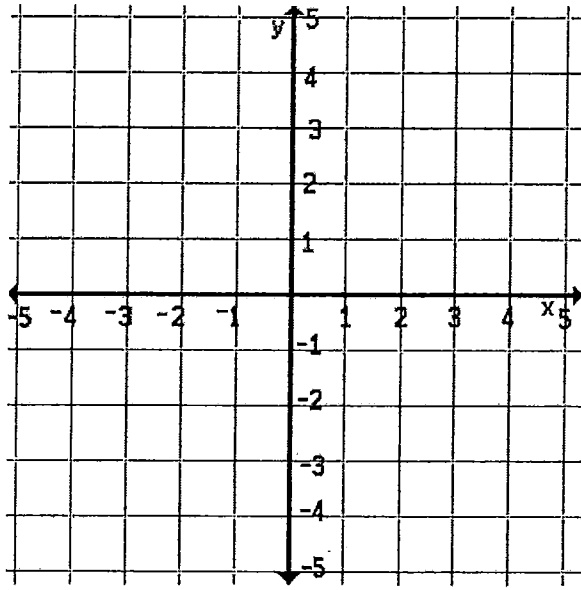
Use the map to find the distance between two locations.

- Pizza Parlor to haunted house _____
- Roller coaster to teacups _____
- Carousel to bumper cars _____
- Ferris wheel to carousel _____
- Swings to haunted house _____
- Parking lot to submarine ride _____
- Petting zoo to carousel _____
- You begin at the parking lot and travel 4 units east, then 11 units north. Where are you?

- You begin at the petting zoo and travel 6 units west, then 7 units north. Where are you?

- If you traveled 13 units east and 5 units south and ended up at the Ferris Wheel, where did you begin? _____
- Name two locations that are the same distance apart on the map. List at least two pairs.

Graph and label each point on the coordinate grid.



1. A (3,2)
2. B (3,4)
3. C (3,-1)
4. D (5,-1)
5. E (4,2)
6. F (4,-1)

Find the distance between each pair of points.

| | | |
|-------------|-------------|-------------|
| 7. A and B | 8. B and C | 9. C and D |
| 10. E and F | 11. A and C | 12. D and F |

Submarine Ride



Bumper Cars



Swings



Ferris Wheel



Carousel



Pizza Parlor



Restrooms



Teacups



Roller Coaster



Parking Lot



Haunted House



Patting Zoo

