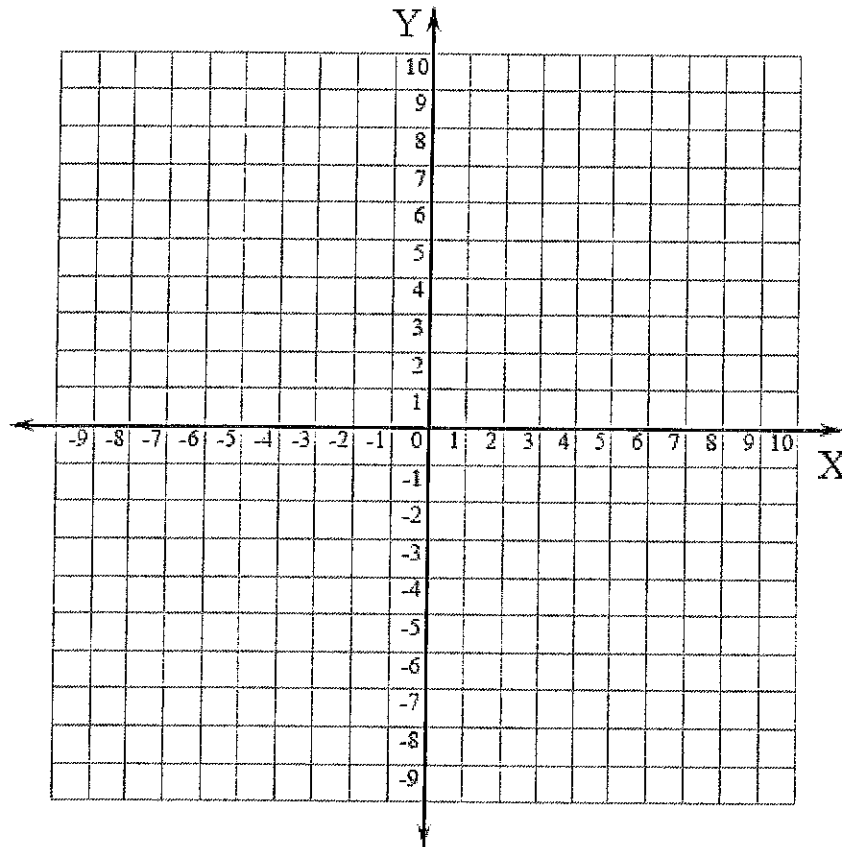


The Coordinate System

- A **coordinate system**, or coordinate plane, is used to locate points in a 2-dimensional plane.
- The horizontal number line is the _____.
- The vertical number line is the _____.
- Their intersection is the _____. (Label)



- The coordinate plane contains four quadrants (I, II, III, IV). Label the quadrants.
- Any point can be located within one of the four quadrants in the coordinate plane using a specific ordered pair of numbers, called its _____.

(x , y)

- The first number in an ordered pair is the x-coordinate.
- The second number is the y-coordinate.

Example: **(3,2)** 3 is the **x- coordinate**, 2 is the **y-coordinate**.

- A point is defined on the coordinate plane by one, AND ONLY ONE, ordered pair.

Practice (5.3)

Tell what point is located at each ordered pair.

1. $(3, -2)$ ____ 2. $(2, 3)$ ____ 3. $(-5, 5)$ ____

4. $(-7, -8)$ ____ 5. $(-4, 4)$ ____ 6. $(-5, 0)$ ____

Write the ordered pair for each given point.

7. E ____ 8. M ____ 9. P ____

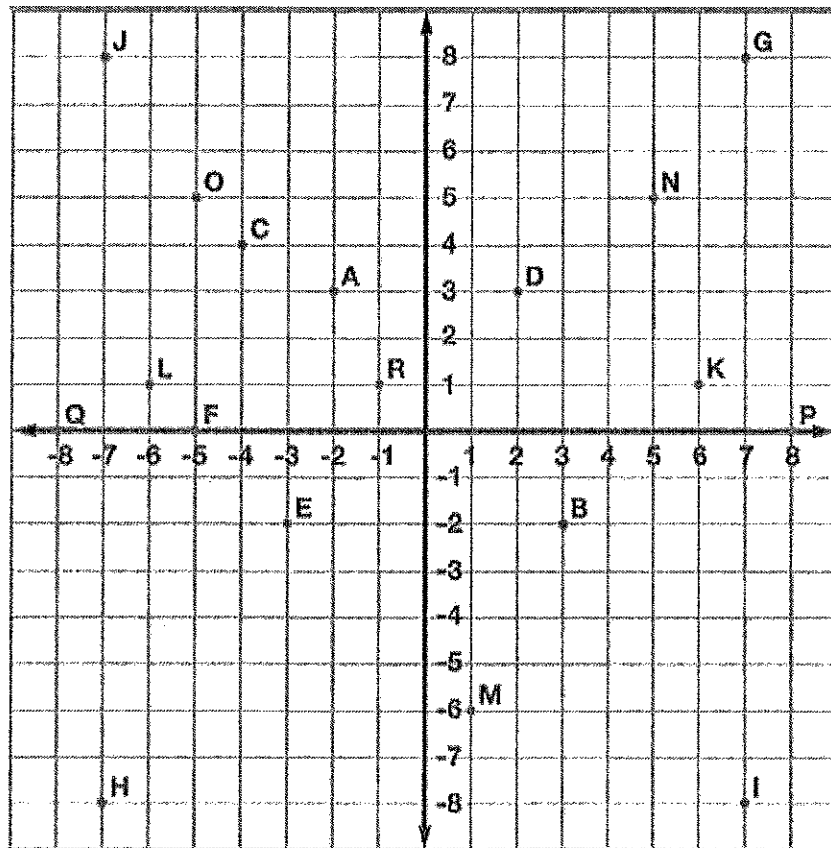
10. G ____ 11. Q ____ 12. N ____

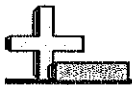
Plot the following points on the coordinate grid.

13. S $(-6, -3)$ 14. T $(2, -4)$ 15. U $(5, 8)$

Identify the quadrant containing each point.

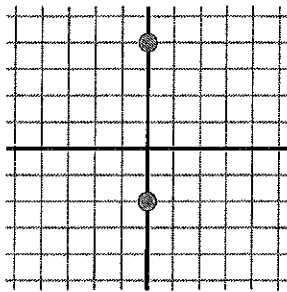
16. B 17. J 18. I 19. D 20. E



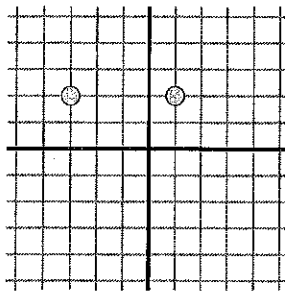


Find the distance between points.

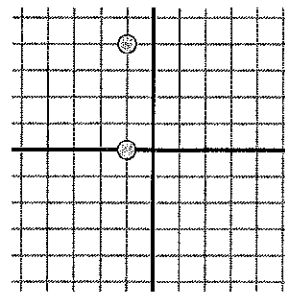
Ex)



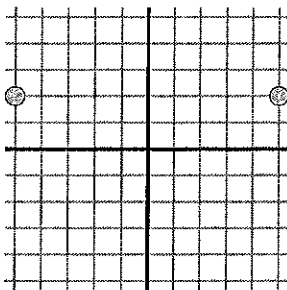
1)



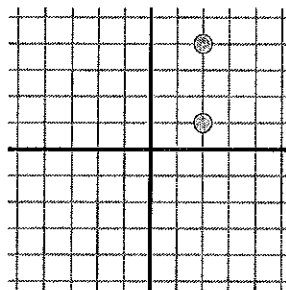
2)



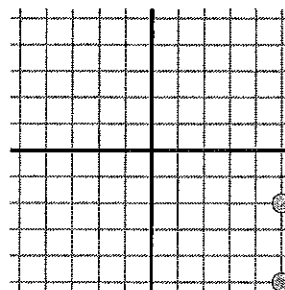
3)



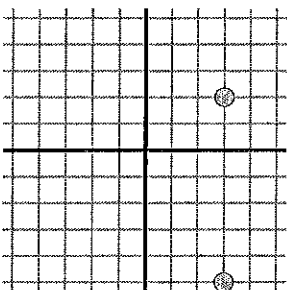
4)



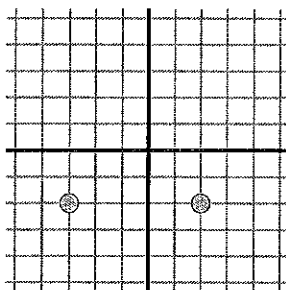
5)



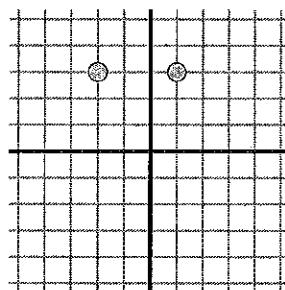
6)



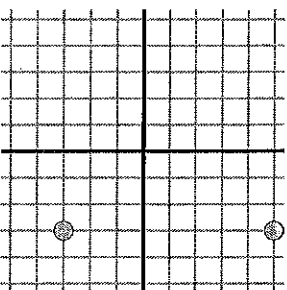
7)



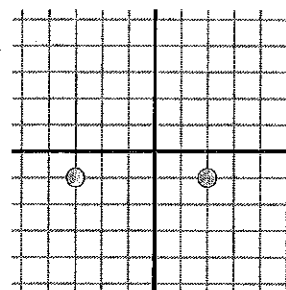
8)



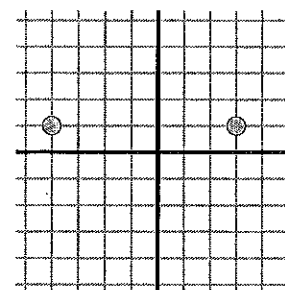
9)



10)



11)



Answers

Ex. 6

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

11. _____



Find the distance between the two points and then determine if it is a horizontal(H) or vertical(V) line.

Answers

- 1) (8, 6) (10, 6)
- 2) (0, 2) (0, 9)
- 3) (5, 1) (5, 5)
- 4) (4, 2) (4, 9)
- 5) (1, 8) (1, 5)
- 6) (0, 10) (0, 8)
- 7) (7, 6) (7, 4)
- 8) (1, 10) (1, 2)
- 9) (4, 1) (7, 1)
- 10) (3, 5) (5, 5)
- 11) (4, 5) (8, 5)
- 12) (10, 8) (4, 8)
- 13) (10, 4) (10, 5)
- 14) (3, 3) (10, 3)
- 15) (3, 8) (3, 0)
- 16) (8, 4) (8, 9)
- 17) (5, 2) (5, 8)
- 18) (8, 10) (9, 10)
- 19) (7, 10) (10, 10)
- 20) (6, 1) (4, 1)

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____