Math Worksheet for 5th Grade

Coordinate plane word problems

Name: Due Date: Teacher: Parent Sign:

1. Point A is 3 units to the right of the origin and 4 units up. What are the coordinates of A?

2. Point B is listed as (-2, 5). What is the x-coordinate and what is the y-coordinate?

3. Which quadrant is the point (4, -3) in?

4. Which point lies on the x-axis: (6, 0), (0, 7), or (-3, 2)?

5. Which point lies on the y-axis: (0, -5), (5, 0), or (2, 3)?

6. Point C is at (2, 7) and point D is at (8, 7). How many units apart are C and D?

7. Point E is at (-1, 4) and point F is at (-1, -2). How many units apart are E and F?

8. A rectangle on a grid has corners at (1, 2), (1, 6), (5, 2), and (5, 6). What is the area of the rectangle?

9. Using the same rectangle in question 8, what is the perimeter?

10. Point G is at (3, 3). You move 4 units to the right and 2 units down. What are the coordinates of the new point?

11. Point H is at (-4, 1). You move 3 units left and 5 units up. What are the coordinates of the new point?

12. Which of these points is closest to the origin: (1, 1), (2, 0), or (0, 3)?

13. If point J is at (7, 0) and point K is at (-3, 0), how many units apart are J and K?

14. A treasure map shows a chest at (2, 6). A player is at (2, 2). How many units must the player move straight up to reach the chest?

15. Point L is at (3, 8) and point M is at (3, 2). What is the midpoint between L and M?

16. What is the midpoint of (0, 0) and (6, 0)?

17. Which point is 2 units left and 3 units down from (5, 4)?

18. Which point is 5 units up from (-2, -1)?

19. On a grid, cities are at A(1, 1), B(1, 5), C(4, 5). How many units along the grid would you travel from A to B to C?

20. A point is at (0, -4). Is this point above or below the x-axis?

21. Point P is at (-6, 3). If you reflect P across the y-axis, what are the coordinates of the reflection?

22. Point Q is at (2, -5). If you reflect Q across the x-axis, what are the coordinates of the reflection?

23. Which coordinate shows a point in the first quadrant: (-2, 3), (3, -2), or (4, 5)?

24. On a map grid, the school is at (3, 2) and the library is at (3, 9). How many blocks north is the library from the school?

25. Point R is at (8, 6). What is the x-coordinate if R is written as (x, 6)?

26. Point S is at (-5, 0). What two facts tell you S is on an axis?

27. Four points are plotted: A(0, 0), B(0, 4), C(6, 4), D(6, 0). What shape do these points make?

28. If point T is at (9, 3) and you move T 7 units left, what is the new x-coordinate?

29. You have a point at (2, 3). Which of these moves will put the point at (2, -1)? (A) 4 units up; (B) 4 units down; (C) 2 units left.

30. On a small map, a bakery is at (-1, 2) and a park is at (3, 2). How many blocks apart are they east-west?

31. Point U is at (4, 4) and point V is at (4, -1). What is the distance between U and V?

32. A triangle has vertices at (1, 1), (4, 1), and (1, 5). What is the length of the base and the height (along the grid lines)?

33. Which point has an x-coordinate of 0 and a y-coordinate of 9?

34. If a point is 6 units to the right of the origin and on the x-axis, what are its coordinates?

35. Point W is at (-3, -2). Which direction and how many units do you move to get from W to (0, 0)?

36. A toy store is at (2, 7). A toy delivery starts at (2, 2), goes straight north to the store, then straight east 5 units. What are the final coordinates?

37. If point Y is at (10, 5) and point Z is at (10, 1), what is the midpoint of YZ?

38. A point is at (-4, 3). Which quadrant is it in?

39. You have points A(2, 2), B(6, 2), C(6, 6), D(2, 6). If you walk A?B?C?D?A, how many units do you walk in total?

40. Which point is directly below (3, 7) by 5 units?

41. A submarine is at (0, -6). It rises 4 units and moves 3 units to the right. What are its new coordinates?

42. Point M is at (-7, 0). Point N is at (-7, -5). Are M and N on the same vertical line, horizontal line, or neither?

43. If a point is at (5, 5) and you move it 5 units left and 5 units down, where does it end up?

44. A rectangle has opposite corners at (-2, 1) and (2, 5). What are the coordinates of the other two corners?

45. Which of these points is NOT in the first quadrant: (4, 4), (0, 3), (3, 0), (5, -1)?

46. You start at (1, 1), go 4 units north, then 6 units east. What are your final coordinates?

47. Point A is at (-2, 3) and point B is at (4, 3). What is the distance from A to B?

48. A farmer marks a barn at (0, 0) and a silo at (0, 8). She walks from the barn to the silo and then to the field at (6, 8). How many units did she walk?

49. Which point has coordinates where x = -3 and y = -4?

50. If a point is at (3, -2) and you reflect it over the origin (rotate 180 deg), what are the new coordinates?