



Name:

Due Date:

Teacher:

Parent Sign:

## Math Worksheet for 6th Grade

### Distance on the coordinate plane

1. On a coordinate grid, point A is at (2, 3) and point B is at (2, 8). How far apart are A and B?
2. A is at (-1, 4) and B is at (3, 4). What is the distance from A to B?
3. The school is at (0, 0) and the library is at (0, 7). How many units apart are they?
4. Point A is (5, 6) and point B is (9, 6). Find the distance AB.
5. A treasure is at (-2, -1) and your starting point is at (-2, 4). How far must you go straight up to reach the treasure?
6. If point P is at (3, 3) and Q is at (3, 0), what is PQ?
7. A is (4, 1) and B is (1, 1). How many units separate A and B?
8. A kite is at (7, 5) and a bird is at (7, -2). What is the vertical distance between them?
9. Point X is at (0, 5) and point Y is at (8, 5). How far is XY?
10. On a map, house H is at (-3, 2) and school S is at (2, 2). How many units apart are H and S?
11. A is at (1, 1) and B is at (4, 5). What is the straight-line distance AB?
12. The points (-2, -3) and (1, 1) are two corners of a garden. Find the length of that side.
13. The stadium is at (0, 0) and a caf? is at (5, 12). How far is the caf? from the stadium in a straight line?
14. Point M is (0, 0). Point N is (8, 15). Find MN.
15. Two friends are at (-1, 0) and (4, 12). How far apart are they by straight-line distance?
16. Find the distance between (2, 3) and (5, 7).
17. A point is at (4, 1) and another point is at (1, 5). How far apart are they?
18. On a treasure map, treasure T is at (1, 2) and clue box C is at (4, 6). What is the direct distance from C to T?
19. Point A is (6, 8) and point B is (2, 4). How far is AB?
20. A rectangle has opposite corners at (1, 1) and (1, 6). What is the length of that side along the grid?
21. Two shops on a straight street are at (3, 2) and (3, 10). How many units apart are the shops?
22. A drone flies from (0, 3) to (4, 3). How many units did it fly?
23. On a coordinate grid, a playground corner is at (-2, 5) and the opposite corner (on the same horizontal line) is at (4, 5). How long is that side?
24. Farmer Tom marks two gates at (2, -1) and (2, 4). How far apart are the gates?
25. The points (7, 0) and (7, 9) mark the ends of a flagpole shadow. What is the shadow length?
26. You walk from (0, 0) to (0, 4), then to (3, 4). What total distance did you walk (along grid lines)?
27. A delivery driver goes from (2, 2) to (2, 7) to (6, 7). What total distance is driven along those straight segments?
28. A robot moves from (-1, 1) to (3, 1) to (3, 5). How many units did the robot travel along the grid?
29. The police station is at (0, 0). A witness walks to (0, 6) then to (8, 6). How many units did the witness walk?
30. A mail carrier travels from (1, 1) to (1, 4) to (5, 4) to (5, 1). What is the total distance traveled along these segments?



## Math Worksheet for 6th Grade

### Distance on the coordinate plane

Name: \_\_\_\_\_

Due Date: \_\_\_\_\_

Teacher: \_\_\_\_\_

Parent Sign: \_\_\_\_\_

31. On a map where streets form a grid, you go from  $(0, 0)$  to  $(0, 5)$  to  $(3, 5)$ . The straight-line distance from start to finish would be shorter. What are (a) the distance walked along streets and (b) the straight-line distance from  $(0,0)$  to  $(3,5)$ ?
32. Two corners of a rectangle are at  $(2, 3)$  and  $(7, 3)$ . The other two corners are at  $(2, 8)$  and  $(7, 8)$ . What is the perimeter of the rectangle?
33. A triangle has vertices at  $(0, 0)$ ,  $(4, 0)$ , and  $(4, 3)$ . Find the length of the hypotenuse (from  $(0,0)$  to  $(4,3)$ ).
34. Points are  $(-3, -4)$  and  $(1, 0)$ . What is the distance between them?
35. A school sets up a straight walking path from  $(2, 2)$  to  $(10, 2)$ . How many units long is the path?
36. A treasure hunt: you start at  $(0,0)$ , go to  $(0, 3)$ , then to  $(4, 3)$ , then to  $(4, 7)$ . How far did you walk along the path?
37. A soccer field corner is at  $(-2, 1)$  and the opposite corner along the length is at  $(10, 1)$ . How long is the field?
38. A straight-line fence runs from  $(-3, 5)$  to  $(5, 13)$ . What is the length of the fence? (Hint: find horizontal and vertical change first.)
39. A straight-line bridge connects  $(1, 2)$  and  $(5, 14)$ . What is the distance between its endpoints?
40. A kite string goes from  $(0, 0)$  to  $(6, 8)$ . How long is the kite string?
41. Two houses are at  $(-4, 0)$  and  $(2, 8)$ . Find the straight-line distance between them.
42. The vertices of a right triangle are at  $(3, 3)$ ,  $(7, 3)$  and  $(7, 11)$ . Find the hypotenuse length (from  $(3,3)$  to  $(7,11)$ ).
43. A path goes from  $A(1, 5)$  to  $B(5, 5)$  to  $C(5, 9)$ . What is the distance  $AC$  along those segments?
44. On a grid, the points  $(0, 0)$  and  $(9, 12)$  are two landmarks. How far apart are they in a straight line?
45. A drone flies diagonally from  $(2, 1)$  to  $(7, 13)$ . What is the distance flown?
46. A rectangle's corners are at  $(-1, -1)$ ,  $(-1, 4)$ ,  $(5, 4)$ , and  $(5, -1)$ . What is the length and width, and what is the perimeter?
47. You start at  $(0, 0)$ , walk to  $(0, 6)$ , then to  $(8, 6)$ , then back to  $(8, 0)$  and finally return to  $(0, 0)$ . What is the total distance walked?
48. On a map, two towns are at  $(-5, -12)$  and  $(5, 12)$ . What is the straight-line distance between the towns?
49. A right triangle has vertices at  $(-2, 0)$ ,  $(4, 0)$  and  $(4, 9)$ . What is the length of the slanted side from  $(-2,0)$  to  $(4,9)$ ?
50. A treasure is at  $(3, 4)$ . A friend is at  $(8, 9)$ . You can walk along the streets (first horizontal then vertical). (a) How many units will you walk if you go along streets from  $(3,4)$  to  $(8,9)$ ? (b) What is the straight-line distance?