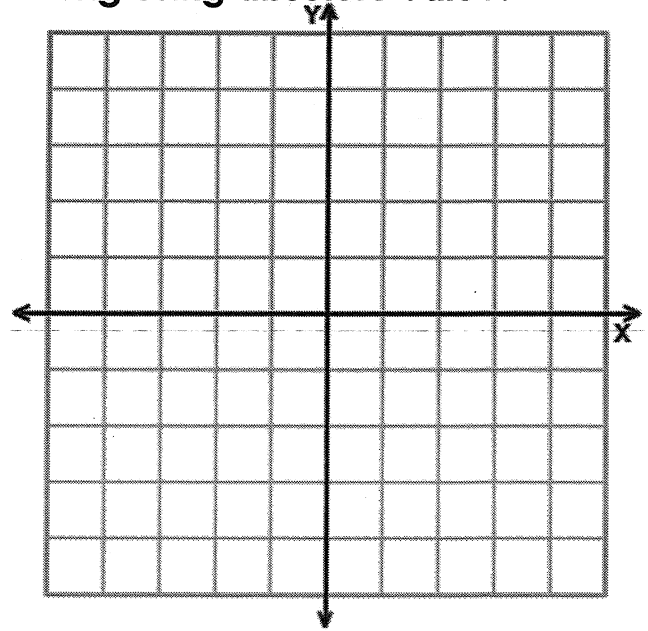
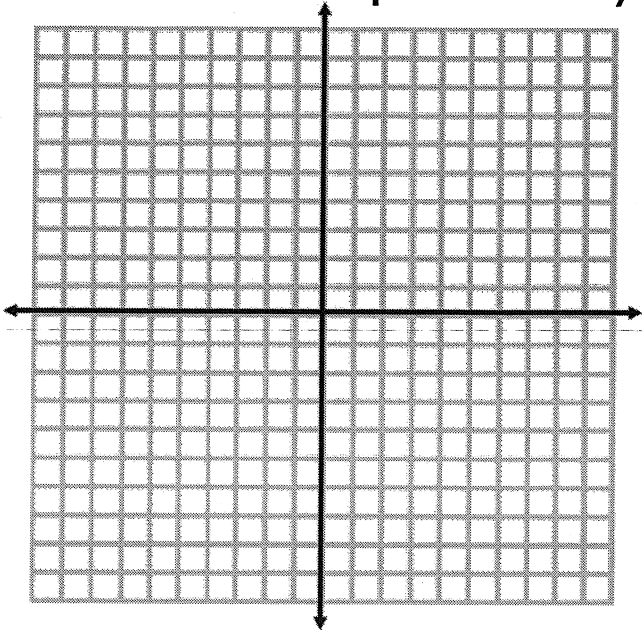


## Distances in the Coordinate Plane Packet

Label the scales on the x- and y-axis. Plot and label the points and find the distance between the points. Show your thinking using absolute value.



1.  $(2, -3), (6, -3)$  \_\_\_\_\_

4.  $(-5, -2), (4, -2)$  \_\_\_\_\_

2.  $(-6, 2), (-6, -1)$  \_\_\_\_\_

5.  $(-3, 4), (5, 4)$  \_\_\_\_\_

3.  $(-1, 1), (-1, 7)$  \_\_\_\_\_

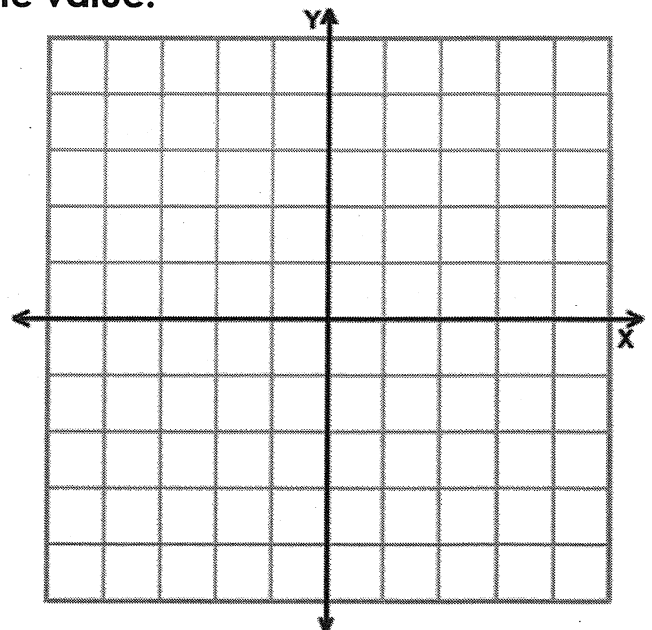
6.  $(-2, -4), (-2, 1)$  \_\_\_\_\_

Label the scales on the x- and y-axis. Draw the figure with the given vertices in the coordinate plane. Label your points. Then, find the perimeter and area of the figure. Show your thinking using absolute value.

7.  $D(1,1), E(1,-2), F(-2,-2), G(-2,1)$

Perimeter: \_\_\_\_\_

Area: \_\_\_\_\_

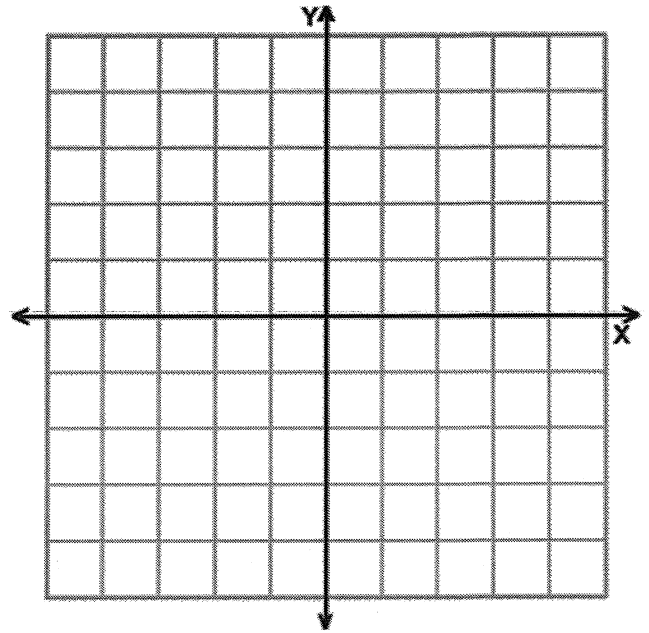


Label the scales on the x- and y-axis. Draw the figure with the given vertices in the coordinate plane. Label your points. Then, find the perimeter and area of the figure. Show your thinking using absolute value.

8.  $P(-2,3)$ ,  $Q(5,3)$ ,  $R(5,-1)$ ,  $S(-2,-1)$

Perimeter: \_\_\_\_\_

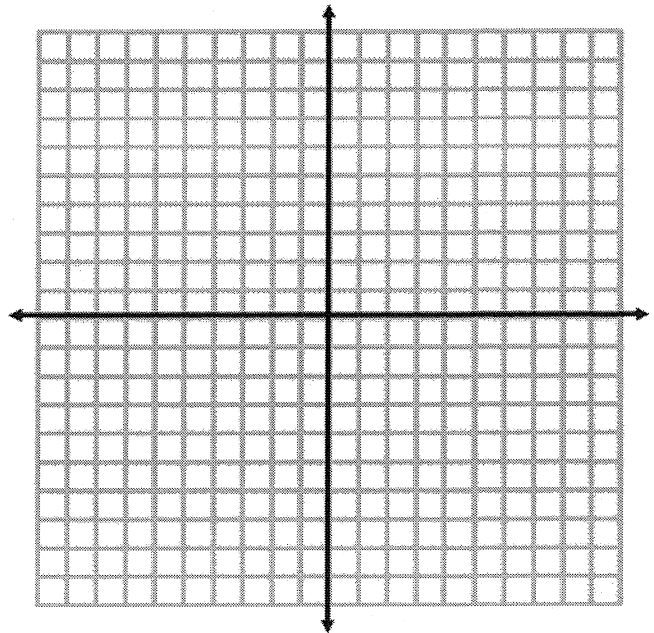
Area: \_\_\_\_\_



9.  $W(-3,2)$ ,  $X(2,2)$ ,  $Y(2,-7)$ ,  $Z(-3,-7)$

Perimeter: \_\_\_\_\_

Area: \_\_\_\_\_



10. Bentley states that the distance between  $R(-8, -3.5)$  and  $S(-8, -12)$  is  $|-12| + |-3.5| = 15.5$  units. Is Bentley correct? Explain your answer. If Bentley is not correct, explain how to find the correct distance between the points.

Find the distance between the pair of points, following the example:

example:  $(1, 4)$  and  $(-3, 4)$      $|1| = 1$ ;  $|-3| = 3$      $1 + 3 = 4$     **4 units**

1.  $(7, -2)$  and  $(11, -2)$  \_\_\_\_\_

2.  $(6, 4)$  and  $(6, -8)$  \_\_\_\_\_

3.  $(8, -10)$  and  $(5, -10)$  \_\_\_\_\_

4.  $(-2, -6)$  and  $(-2, 5)$  \_\_\_\_\_

5.  $(-5, 2)$  and  $(-5, -4)$  \_\_\_\_\_

Write the coordinates of two points that are the given distance from these points and horizontal/vertical:

6. 5 units from  $(-1, -2)$      $( \quad, -2)$  and  $( \quad, -2)$  \_\_\_\_\_

7. 8 units from  $(2, 4)$      $(2, \quad)$  and  $(2, \quad)$  \_\_\_\_\_

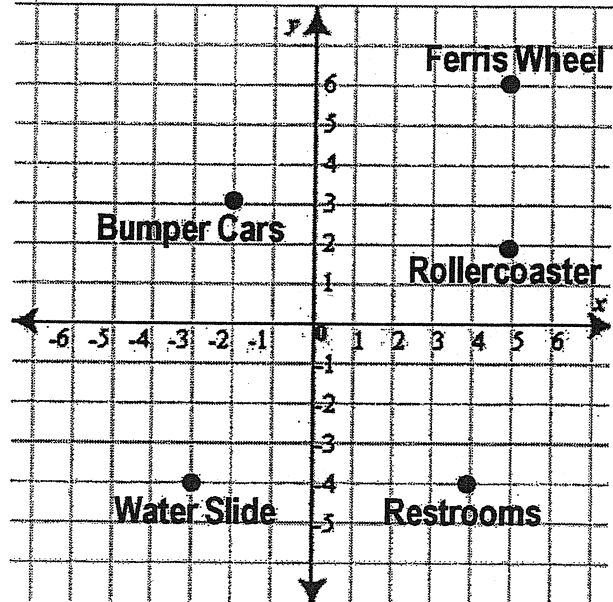
8. 3 units from  $(-7, -5)$      $(-7, \quad)$  and  $(-7, \quad)$  \_\_\_\_\_

9. 6 units from  $(4, -1)$      $(4, \quad)$  and  $(4, \quad)$  \_\_\_\_\_

10. 10 units from  $(-1, 9)$      $( \quad, 9)$  and  $( \quad, 9)$  \_\_\_\_\_

11. 7 units from  $(-3, 2)$      $( \quad, 2)$  and  $( \quad, 2)$  \_\_\_\_\_

The map shows the location of several areas in an amusement park. Each unit represents 1 kilometer.



12. How far is the Ferris wheel from the rollercoaster? \_\_\_\_\_

13. How far is the water slide from the restrooms? \_\_\_\_\_

14. Which of the following values could be the y-coordinate of the point  $(10, \quad)$  that is 13 units from  $(10, 6)$ ?

- A. 17                      B. 3                      C. -1                      D. -7

15. What is the distance between the points  $(4, -7)$  and  $(-5, -7)$ ?

- A. 1 unit                      B. 3 units                      C. 7 units                      D. 9 units