Name $\qquad$ Date $\qquad$

## Use Coordinate Geometry: Play Answer Sheet




## Use Coordinate Geometry: Play

## Number of Questions: 15

Questions 1-6 are selected-response questions. Write the letters of the correct answers on the answer sheet.

1. Which of these points are 7 units from $(-3,8)$ ? Select all that apply.
A. $(-3,1)$
B. $(4,8)$
C. $(-3,-1)$
D. $(-7,8)$
E. $(-3,15)$
2. The coordinate plane contains three line segments, intersecting at point $H$. Which angle is a right angle?
A. $\angle G H F$
B. $\angle E H F$
C. $\angle H F E$
D. $\angle E H G$

3. Which of the statements are true about figure EFGH? Select all that apply.
A. The figure $E F G H$ has four right angles.
B. To find the distance from point $E$ to point $H$, subtract $5-5$.
C. The point $(-1,5)$ lies on $\overline{E F}$.
D. $\overline{E H}$ and $\overline{H G}$ intersect at $(-5,5)$.
E. The area of figure $E F G H$ is 10 times the length of $\overline{F G}$.

4. Selina marks a point $(-2,3)$ on her coordinate plane. Her partner marks another point 4 units away in either the vertical or horizontal direction.

What could the coordinates of the second point be?
A. $(-6,7)$
B. $(-4,1)$
C. $(4,3)$
D. $(-2,4)$
E. $(2,3)$
5. Which type of angle is formed when a vertical line segment and a horizontal line segment intersect?
A. obtuse
B. acute
C. right
D. straight
6. On the coordinate grid, look at the angles in the four polygons.

Which of the following is a right angle?
A. $\angle E H G$
B. $\angle J K L$
C. $\angle T A X$
D. $\angle N R Q$


Questions 7-10 are fill-in-the-blank questions. Write the correct answers in the spaces on the answer sheet.
7. Determine the area of a rectangle with vertices at $(-4,-5),(-4,-12),(-7,-5)$, and $(-7,-12)$ in the coordinate plane.
The area of the rectangle is $\qquad$ square units.
8. Two vertices of a rectangle are at the origin and at (4,9). Each side of the rectangle is parallel to the $x$-axis or $y$-axis. What is the area of the rectangle?

The area of the rectangle is $\qquad$ square units.
9. What is the distance between the points $(-5,-7)$ and $(-5,-3)$ ? The distance is $\qquad$ .
10. Determine the perimeter and the fourth vertex of a rectangle with vertices at the origin, $(9,0)$ and $(0,-5)$.

The fourth vertex is at (a) $\qquad$ .

The perimeter is (b) $\qquad$ units.

## Questions 11-15 are graphing questions. Graph the correct answers on the

 grids provided on the answer sheet.11. The graph shows the point $(4,-2)$.

On the grid on the answer sheet, plot two more points with the same $x$-coordinate that are 5 units away from $(4,-2)$.

12. On the grid on the answer sheet, plot the point that is half the distance from $(-8,-2)$ to $(6,-2)$.

13. Two vertices of a square, $(-4,9)$ and $(1,4)$, are shown in the coordinate plane. The square has an area of 25 square units.

On the grid on the answer sheet, plot the other two vertices of the square.

14. On the grid on the answer sheet, plot the point in quadrant I that is 5 units from $(-2,3)$ and 9 units from $(3,-6)$.

15. A horizontal line contains the point $(0,-4)$. A vertical line contains the point $(-3,0)$.

On the grid on the answer sheet, plot the point where the two lines intersect.

