$\qquad$ Hour: $\qquad$

## COORDINATE PLANE (6.5-6.5E) STUDY GUiDE

1. Write the ordered pair corresponding to the point. Then, describe the location of the point by naming the quadrant in which it is located. If the point is on an axis, name the axis and which quadrants it lies between.
A. Ordered Pair: $\qquad$
Location: $\qquad$
B. Ordered Pair: $\qquad$
Location: $\qquad$
C. Ordered Pair: $\qquad$ Location: $\qquad$
D. Ordered Pair: $\qquad$
Location: $\qquad$
E. Ordered Pair: $\qquad$
Location: $\qquad$

F. Ordered Pair: $\qquad$
Location: $\qquad$
2. Plot and label the ordered pair in the coordinate plane. Then, describe the location of the point by naming the quadrant in which it is located. If the point is on an axis, name the axis and which quadrants it lies between.
a. $A(2,-4)$ Location: $\qquad$
b. $B(-3,-3)$ Location: $\qquad$
c. $C(0,0)$ Location: $\qquad$
d. $D(5,3)$ Location: $\qquad$
e. $E(-4,0)$ Location: $\qquad$
f. $F(-5,1)$ Location: $\qquad$

$\qquad$ Hour: $\qquad$
Below is a table of locations at Math Park. Each grid line represents 1 meter.
3. Use the coordinates in the table to create a map of Math Park. Label your locations!|

| Location | Ordered Pair |
| :---: | :---: |
| Sum Swings | $(5,6)$ |
| Subtraction Slide | $(3,6)$ |
| Product Playground | $(-1,4)$ |
| Factor Forest | $(5,-7)$ |
| Term Tables | $(-1,-1)$ |

4. What is the distance from the Sum Swings to the Factor Forest? Use absolute value to show your thinking.

5. What is the distance from the Product Playground to the Term Tables? Use absolute value to show your thinking.

Find the distance between the two points using ABSOLUTE VALUE. Show your thinking!!!
6. $(-3,2)$ and $(5,2)$
7. $(8,2)$ and $(8,0)$
8. $(-7,-9)$ and (-2, -9)
9. $(6,6)$ and $(6,-4)$
10. $(3,7)$ and $(3,5)$
$\qquad$ Hour: $\qquad$
11.The pool is located at $(0,0)$.
a. To get to your house from the pool, you walk 3 blocks west (left) and 1 block north (up). What ordered pair corresponds to the location of your house?
b. What quadrant is your house located in?

Plot and label each point. Then reflect the point over the indicated axis. Be sure to plot and label the reflected point. Give the coordinates of the reflected point.
12. $R(-5,8)$

Reflect over the $x$-axis.
Ordered pair of reflected point: $\mathrm{R}^{\prime}$ $\qquad$
13. $S(-7,-3)$

Reflect over the $y$-axis.
Ordered pair of reflected point: $S^{\prime}$ $\qquad$


Plot and label each point. Then reflect the point over the indicated axis. Be sure to plot and label the reflected point. Give the coordinates of the reflected point.
14. $T(8,2)$

Reflect over the $y$-axis.
Ordered pair of reflected point: $T^{\prime}$ $\qquad$
15. $U(2.5,-2)$

Reflect over the $x$-axis.
Ordered pair of reflected point: $U^{\prime}$ $\qquad$

16. The point $(5,-2)$ is reflected across the $x$-axis. What are the coordinates of the reflection?
17. The point $(-6,8)$ is reflected across the $y$-axis. What are the coordinates of the reflection?
$\qquad$
18. Plot the point $W(-3,-1)$. Then, reflect point $W$ over the $x$-axis followed by the $y$-axis. Plot and label the point after each reflection. Write the ordered pair of the final point.

19. Plot the point $Z(5,2)$. Then, reflect point $Z$ over the $y$-axis followed by the $x$-axis. Plot and label the point after each reflection. Write the ordered pair of the final point.


