$\qquad$ Period: $\qquad$

## TRANSFORMATIONS QUIZ \#1 REVIEW W/S

1. Graph $\triangle \mathrm{ABC}$ with vertices $\mathrm{A}(2,4), \mathrm{B}(0,-2)$, and $\mathrm{C}(-3,1)$. Graph and find the coordinates of $\Delta A^{\prime} B^{\prime} C^{\prime}$ using the translation rule $(x, y) \rightarrow(x+2, y-1)$

$\qquad$
2. Point $Y(-2,3)$ is translated six units to the right and nine units down, what are the coordinates of Point $\mathrm{Y}^{\prime}$ ?
3. Quadrilateral ABCD has vertices $\mathrm{A}(-1,4), \mathrm{B}(-3,2), \mathrm{C}(-2,-1)$, and $\mathrm{D}(1,-2)$. Use the translation rule $(\mathrm{x}, \mathrm{y}) \rightarrow(\mathrm{x}+2, \mathrm{y}-3)$ to graph quadrilateral A'B'C'D'. (Be sure to label each of the new points with the correct letter)


## 4-7: Use the graph below.

$\Delta \mathrm{PSV}$ is translated one unit left and three units down.

4. Graph $\Delta \mathrm{P}^{\prime} \mathrm{S}^{\prime} \mathrm{V}^{\prime}$ using the given translation.
5. Write a rule for the given translation.

$$
(x, y) \rightarrow(\quad, \quad)
$$

6. Find the coordinates for point $P$. $($,
7. Find the coordinates of point $P^{\prime} .($, $)$
8. Use arrow notation to write a rule that describes the translation.


9: Quadrilateral BGRW is reflected over the x - axis. Draw and label the image of Quadrilateral B'G'R'W'.

9. What are the coordinates of W'?


10: $\Delta \mathrm{GIL}$ is reflected over the y - axis. Draw and label the image of $\Delta \mathrm{G}^{\prime} \mathrm{I}^{\prime} \mathrm{L}^{\prime}$.

10. What are the coordinates of I'?


11: Draw the line of reflection that caused SALP to reflect onto S'A'L'P'.


12: $\Delta \mathrm{DMP}$ is reflected over the given line. Draw and label the image of $\Delta \mathrm{D}^{\prime} \mathrm{M}^{\prime} \mathrm{P}^{\prime}$.

12. What are the coordinates of $\mathrm{P}^{\prime}$ ?

$$
P^{\prime}(\quad, \quad)
$$

13-16: Use the graph below
13. What are the coordinates of $\mathrm{A}(3,-2)$ under a $90^{\circ}$ counterclockwise rotation about the origin?

$$
A^{\prime}(\quad, \quad)
$$

14. What are the coordinates of $B(-4,-5)$ under a $180^{\circ}$ counterclockwise rotation about the origin?

$$
B^{\prime}(\quad, \quad)
$$

15. What are the coordinates of $C(6,1)$ under a $90^{\circ}$ clockwise rotation about the origin?

$$
C^{\prime}(\quad, \quad)
$$

16. What are the coordinates of $\mathrm{D}(-4,1)$ under a $270^{\circ}$ counterclockwise rotation about the origin?

$$
D^{\prime}(\quad, \quad)
$$


17. What is a reflection?
18. What is a translation?
19. What is a rotation?
20. What is a transformation?

