

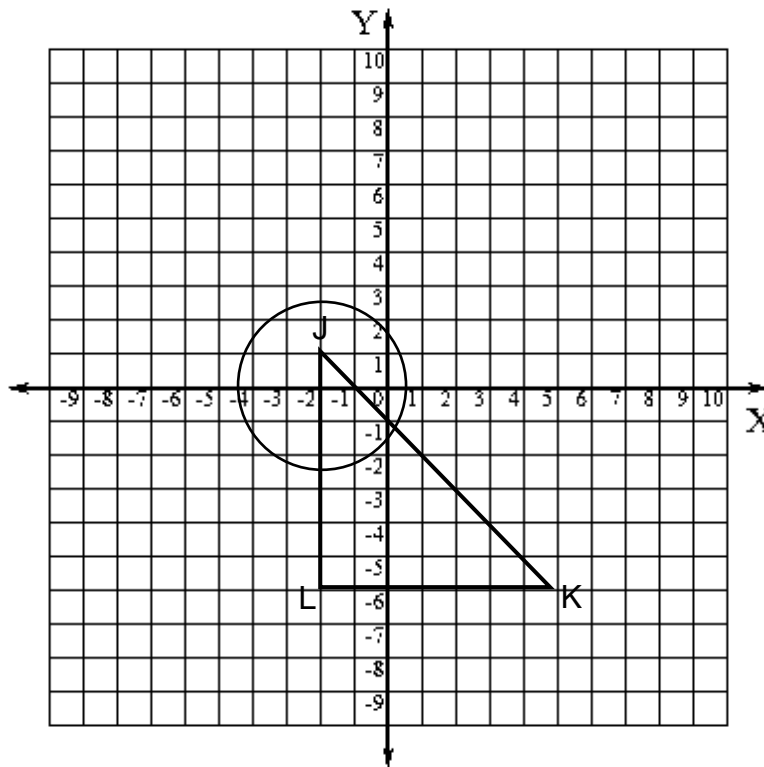
Name: _____

Test Review: Coordinate Plane Translations and Reflections

Vocabulary:

Coordinate Plane, Ordered Pair, Quadrant, x-axis, y-axis, Translation, Reflection, Transformation

Use the coordinate plane below to answer questions 1 – 5.



1. Which of the following points represents point K?

- A. (-2, 1)
- B. (5, -6)
- C. (0, 0)
- D. (5, 6)

2. Which of the following points is *inside* both the triangle and the circle?

- A. (-1, 1)
- B. (1, 1)
- C. (-1, -1)
- D. (1, -1)

3. Which point is represented by (-2, -6)?

- A. Point J
- B. Point K
- C. Point L
- D. Point O

4. Which point lies inside the circle, but outside the triangle?

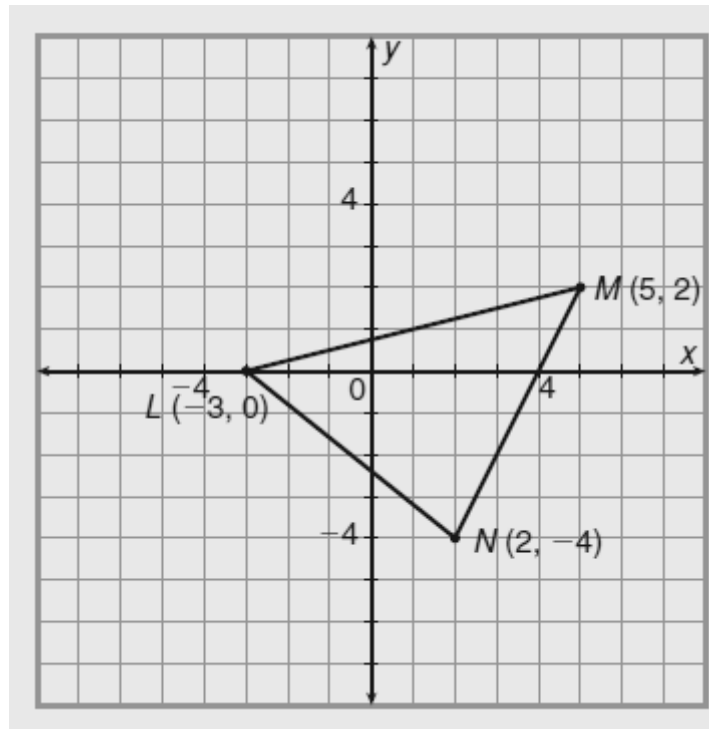
- A. (-3, 0)
- B. (3, 0)
- C. (0, -3)
- D. (-3, 3)

5. Which point is outside both shapes?

- A. (-1, 0)
- B. (-1, -1)
- C. (2, 2)
- D. (-2, -2)

Translations

6. Triangle LMN is translated to a new location. If point L is translated to point $L' = (-6, 4)$, draw the new triangle and state the coordinates of M' and N' .



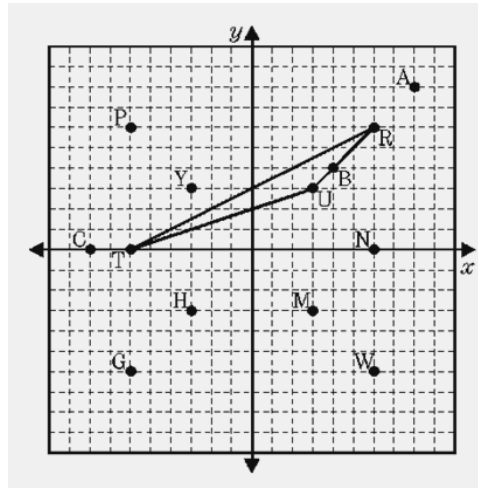
7. Use the Coordinate Plane above to help! Point $B = (5, -7)$ is translated to point $B' = (-4, -4)$. Describe the translation.
8. Use the Coordinate Plane above to help! Point $G = (-4, -6)$ is translated to point $G' = (-8, -2)$. Describe the translation.
9. Use the Coordinate Plane above to help! If the point $H = (-5, 7)$ is translated up eight units and four units right, what are the coordinates of the new point?
10. Use the Coordinate Plane above to help! If the point $K = (3, -8)$ is translated down six units and two units left, what are the coordinates of the new point?

Reflections

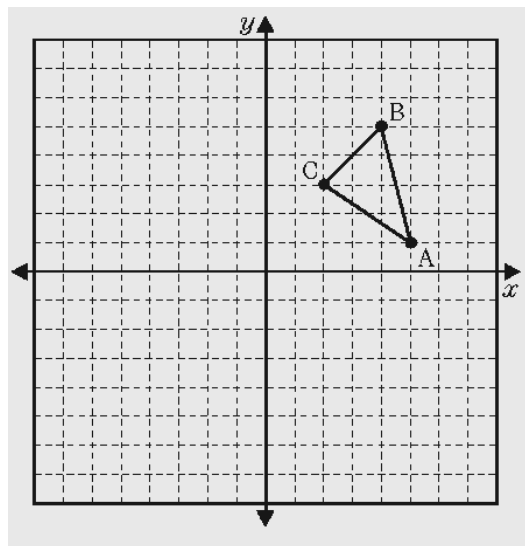
11. Point $F = (5, -17)$ is reflected over the x -axis. What are the coordinates of F' ?

12. Point $W = (-7, -11)$ is reflected over the y -axis. What are the coordinates of W' ?

13. Triangle RUT with coordinates $R(6,6)$, $U(3,3)$ and $T(-6, 0)$, undergoes a reflection over the y -axis. Which points are the coordinates of the reflection?



14. Triangle $A'B'C'$ is the image of Triangle ABC after a reflection over the x -axis. What are the coordinates of A' , B' and C' ?



A. $A'(5,1)$, $B'(4,5)$, $C'(2,3)$

B. $A'(5,-1)$, $B'(4,-5)$, $C'(2,-3)$

C. $A'(-5,1)$, $B'(-4,5)$, $C'(-2,3)$

D. $A'(-5,-1)$, $B'(-4,-5)$, $C'(-2,-3)$

15) $42 \div 6 - (-5 - 2)$

16) $\frac{-8+23}{-3}$

17) $-1 - 6 + 7$

18. The weather section of the newspaper listed the temperatures for 4 cities.

| CITY | TEMPERATURE (° F) |
|----------|--------------------|
| Billings | -9 |
| Denver | 5 |
| Boston | -2 |
| Cheyenne | 11 |

List these temperatures in order from **warmest** to **coldest**.

19. Jamie's checking account has a balance of \$55. Use the table below to answer the following question.

| Date | Transaction Type and Amount |
|---------|-----------------------------|
| 8/15/12 | Deposit \$200 |
| 8/18/12 | Withdrawal \$75 |
| 8/24/12 | Withdrawal \$63 |
| 8/30/12 | Deposit \$87 |

What is Jamie's balance after all four of these transactions?

20. Over a period of one week, the temperatures in Anchorage, Alaska were as follows (all in degrees Fahrenheit): -7, -5, 3, -1, -3, -5

What was the average temperature for this week?

21. In Richmond, Texas the temperature was 76 degrees in the morning. By the afternoon, the temperature had risen 12 degrees. What was the temperature in Richmond, Texas that afternoon?

22. Lori has lost 2 pounds every week for 11 weeks. What integer represents her total weight loss?

23. During a heat wave, the temperature rose 27 degrees over a period of 3 hours. What integer represents the number of degrees the temperature rose *each hour*?

24. A dive team is examining a coral reef at an elevation of 45 feet below sea level. A hiking group is climbing at an elevation of 35 feet above sea level. What is the difference in the elevations of these two groups of people? *Drawing a picture will help you with this problem.*