Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Math 2: Unit 6 Review Sheet

**Part 1: Transformations**

1.Reflect over the y axis 2. Rotate 180° 3. Translate (x, y) 🡪 (x + 6, y – 5)

4. Rotate 90° clockwise 5. Reflect over the x axis 6. Rotate 270° clockwise

7. Reflect over y = x 8. Dilate k = 2

**Part 2: Compositions of Transformations. Continue the transformation for each. Do not start over.**

9. a. Start at (0, 0)…translate (x, y) 🡪 (x – 3, y + 9) \_\_\_\_\_\_\_\_\_\_\_\_\_

 b. Continue…reflect over the x axis \_\_\_\_\_\_\_\_\_\_\_\_\_ f. Rotate 270° clockwise \_\_\_\_\_\_\_\_\_\_\_\_\_

 c. Rotate 90° clockwise \_\_\_\_\_\_\_\_\_\_\_\_\_ g. Reflect over the y axis \_\_\_\_\_\_\_\_\_\_\_\_\_

 d. Dilate k = 3 \_\_\_\_\_\_\_\_\_\_\_\_\_ h. Translate (x, y) 🡪 (x – 1, y) \_\_\_\_\_\_\_\_\_\_

 e. Reflect over y = x \_\_\_\_\_\_\_\_\_\_\_\_\_ i. Rotate 180° \_\_\_\_\_\_\_\_\_\_\_\_\_

**Complete the composition of transformations. Be sure to label ALL points**.

10. Reflect over the y axis 11. Rotate 90° clockwise

 Rotate 180° Translate (x, y) 🡪 (x – 4, y + 5)

**‘\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ‘\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**‘‘\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ‘‘\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Part 3: Use the rules to find the new image points, using the 3 preimage points below. Do not continue the transformations.**

U(8, 2) G(-6, -1) A(7, -3)

12. Rotate 270° clockwise 13. Reflect over y = x

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

14. Reflect over the x axis 15. Rotate 180°

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

16. Translate (x, y) 🡪 (x – 5, y + 10) 17. Dilate k = 3

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Part 4: Backwards!**

18. A’(5, 3) was translated using (x, y) 🡪 (x + 1, y – 2). Find A. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19. B’(0, 3) was reflected over the x axis. Find B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

20. C’(-10, 4) was rotated 180 degrees. Find C. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

21. D’(8, 7) was dilated using k = ½ . Find D. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

22. E’(-5, -1) was translated using (x, y) 🡪 (x, y – 5). Find E. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

23. F’(-2, 8) was reflected over y = x. Find F. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_