Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_

**Dilations Practice**

Find the coordinates of the vertices of each figure after the given transformation.

1. **Dilation of 4**  2. **Dilation of ½**

 I (-1, 4), M (-1, 1), B (2, 4) A (6, 2), B (4, 1), C (-8, -4)

 I’ A’

 M’ B’

 B’ C’

3. **Dilation of 3.5** 4. **Dilation of ¼**

 D (2, 4), E (5, -2), F (-1, -4) Q (-4, -2), P (-8, 4), R (-3, 8)

 D’ Q’

 E’ P’

 F’ R’

Graph the image of the figure using the transformation given.

5. **Dilation of 3** 6. **Dilation of** $\frac{1}{3}$

 J (-1, -1), U (1, 3), W (0, -2) X (-6, 6), Y (-3, -6), Z (3, 3)

 J’ X’

 U’ Y’

 W’ Z’

 

Write a rule to describe the each transformation.

7. 8.

 K (-1, -2), U (-2, 2), V (2, 2), Q (2, -1) W (0, -2), X (-8, 4), Y (-4, 0), Z (-6, 3)

 to to

 K’ (-2, -4), U’ (-4, 4), V’ (4, 4), Q’ (4, -2) W’ (0, -1), X’ (-4, 2), Y’ (-2, 0), Z’ (-3, 1.5)

 **Scale Factor:** **Scale Factor:**

9. 10.

  

 **Scale Factor:** **Scale Factor:**