## Perform the given dilation on each given pre-image with the given center of dilation.

1. Dilate by $c=\frac{1}{4}$, center $(0,0)$

2. Dilate by $c=2$, center $(6,4)$

3. Dilate by $c=\frac{1}{3}$, center $(0,0)$

4. Dilate by $c=\frac{1}{2}$, center $(2,2)$

5. Dilate by $c=\frac{3}{2}$, center $(0,0)$

6. Dilate by $c=\frac{2}{3}$, center $(-3,-6)$

7. Dilate by $c=\frac{3}{4}$, center $(0,0)$

8. Dilate by $c=\frac{1}{2}$, center $(-6,2)$

9. Dilate by $c=\frac{4}{3}$, center $(0,0)$


L1-S4
10. Dilate by $c=\frac{1}{4}$, center $(4,4)$

13. Dilate by $c=2$, center $(0,0)$

16. Dilate by $c=\frac{1}{3}$, center $(3,0)$


## Dilation Practice

11. Dilate by $c=\frac{1}{2}$, center $(0,0)$

12. Dilate by $c=\frac{3}{2}$, center $(-4,-2)$

13. Dilate by $c=\frac{2}{3}$, center $(0,0)$

8.G. 3
14. Dilate by $c=\frac{3}{4}$, center $(-4,8)$

15. Dilate by $c=\frac{1}{2}$, center $(0,0)$

16. Dilate by $c=\frac{4}{3}$, center $(0,-6)$

17. Dilate by $c=\frac{1}{2}$, center $(0,0)$

18. Dilate by $c=3$, center ( 4,4 )

19. Dilate by $c=\frac{1}{3}$, center $(-6,3)$

20. Dilate by $c=2$, center (2,2)

21. Dilate by $c=\frac{5}{2}$, center $(6,2)$

22. Dilate by $c=\frac{2}{3}$, center $(3,-6)$

23. Dilate by $c=\frac{3}{2}$, center $(-6,4)$

24. Dilate by $c=\frac{1}{2}$, center $(-8,8)$

25. Dilate by $c=\frac{5}{3}$, center $(6,6)$


## Dilation Practice: Answer Key

Perform the given dilation on each given pre-image. The images (answers) are lighter in green.

1. Dilate by $c=\frac{1}{4}$, center $(0,0)$

2. Dilate by $c=2$, center $(6,4)$

3. Dilate by $c=\frac{1}{3}$, center $(0,0)$

4. Dilate by $c=\frac{1}{2}$, center $(2,2)$

5. Dilate by $c=\frac{3}{2}$, center $(0,0)$

6. Dilate by $c=\frac{2}{3}$, center $(-3,-6)$

7. Dilate by $c=\frac{3}{4}$, center $(0,0)$

8. Dilate by $c=\frac{1}{2}$, center $(-6,2)$

9. Dilate by $c=\frac{4}{3}$, center $(0,0)$


## L1-S4

10. Dilate by $c=\frac{1}{4}$, center $(4,4)$

11. Dilate by $c=2$, center $(0,0)$

12. Dilate by $c=\frac{1}{3}$, center $(3,0)$


## Dilation Practice

11. Dilate by $c=\frac{1}{2}$, center $(0,0)$

12. Dilate by $c=\frac{3}{2}$, center $(-4,-2)$

13. Dilate by $c=\frac{2}{3}$, center $(0,0)$

8.G. 3
14. Dilate by $c=\frac{3}{4}$, center $(-4,8)$

15. Dilate by $c=\frac{1}{2}$, center $(0,0)$

16. Dilate by $c=\frac{4}{3}$, center $(0,-6)$

17. Dilate by $c=\frac{1}{2}$, center $(0,0)$


Possible response: The shape will shrink and get closer to $(0,0)$. It will be half the size and therefore similar.
22. Dilate by $c=3$, center ( 4,4 )


Possible response: The bottom right corner will move straight down. The shape will enlarge and be similar.
25. Dilate by $c=\frac{1}{3}$, center $(-6,3)$


Possible response: The shape will shrink and move left. It will be a third of the size and similar.
20. Dilate by $c=2$, center ( 2,2 )


Possible response: The shape will enlarge and stay anchored at (2,2). It will be twice the size and similar.
23. Dilate by $c=\frac{5}{2}$, center $(6,2)$


Possible response: The shape will enlarge to be mainly in quadrant II moving left.
26. Dilate by $c=\frac{2}{3}$, center $(3,-6)$


Possible response: The shape will shrink and move down. It will be a two-thirds of the size and similar.
21. Dilate by $c=\frac{3}{2}$, center $(-6,4)$


Possible response: The shape will enlarge and get move down and right. It will be 1.5 times the size and similar.
24. Dilate by $c=\frac{1}{2}$, center $(-8,8)$


Possible response: The shape will shrink and move up and left. It will be half the size and similar.
27. Dilate by $c=\frac{5}{3}$, center $(6,6)$


Possible response: The shape will enlarge and stay
anchored at (6,6).

