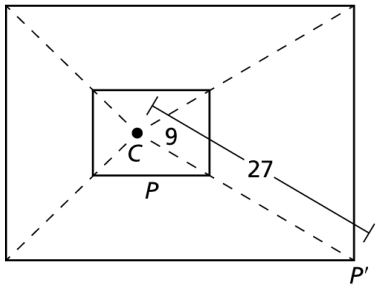
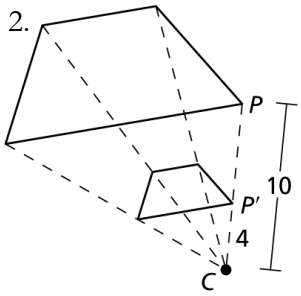
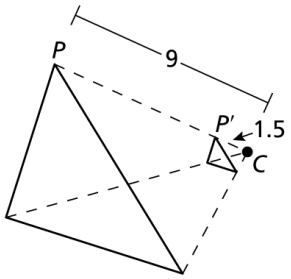
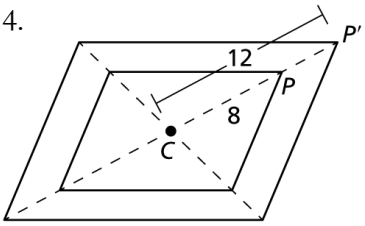
Geometry
Dilation Practice

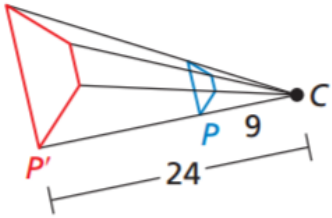
Determine if the given dilation is a reduction or enlargement. Determine the scale factor for each.

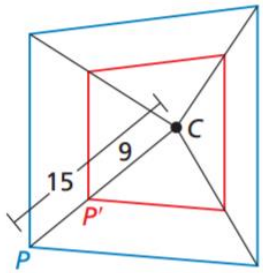
1. 

2. 

3. 

4. 

5. 

6. 

Determine the coordinates for the image of ΔABC, A(-2, 3) B(1, -2) C(3, 4) after each dilation with the given scale factor. Also determine if the dilation is an enlargement or reduction.

7. $k = 3$

8. $k = \frac{1}{2}$

9. $k = 5$

Determine if each dilation is an enlargement or reduction and state the scale factor. Also, determine the image for A(2, 6) and B(8, -4).

10. $(x, y) \rightarrow (2x, 2y)$

11. $(x, y) \rightarrow \left(\frac{1}{3}x, \frac{1}{3}y\right)$

12. $(x, y) \rightarrow (4x, 4y)$

Find the coordinates of each image after a dilation with the given scale factor.

13. $D(4, -2), E(0, 6), F(-8, 2); k = 50\%$

14. $G(3, 6), H(0, -9), J(-12, 6); k = \frac{1}{3}$

15. $L(1, -2), M(-1, 3), N(0, 4); k = 3$

16. $P(4, 5), Q(-8, 3), R(4, -12); k = \frac{1}{4}$

17. $S(10,5), T(5, 4), U(-2, 4); k = 40\%$

18. $W(5, -10), X(8, 5), Z(-3, 0); k = 2.5$

19. $C(5,0), A(2, 0), T(-3, 5); k = 400\%$

20. $D(8, 2), O(-12, 5), G(0, -4); k = \frac{3}{4}$