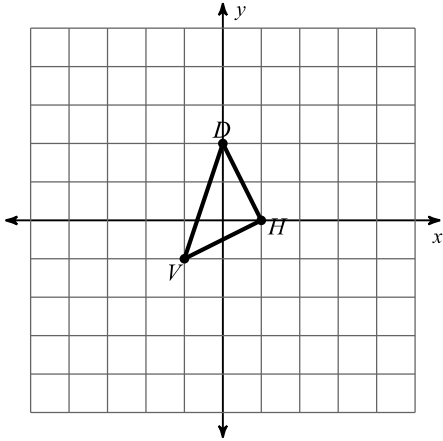


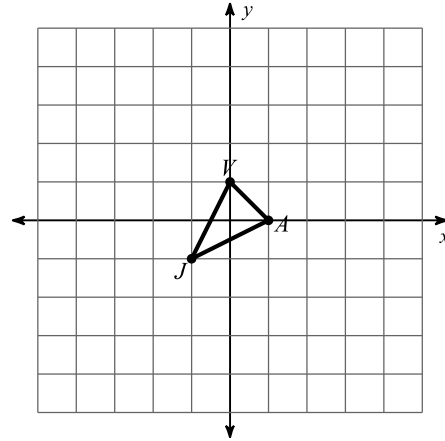
# Dilations

Graph the image of the figure using the transformation given.

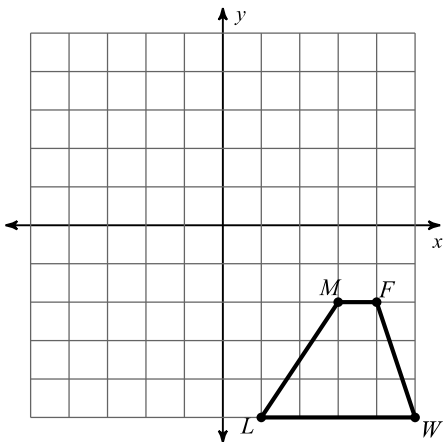
1) dilation of 2



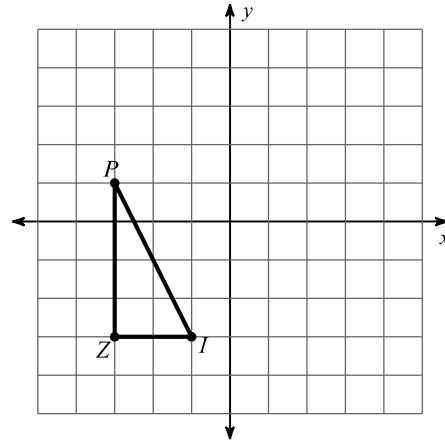
2) dilation of 4



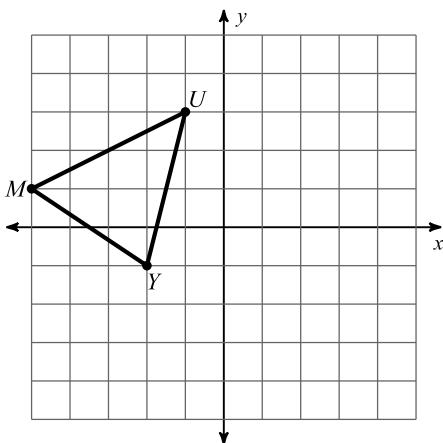
3) dilation of  $\frac{1}{2}$



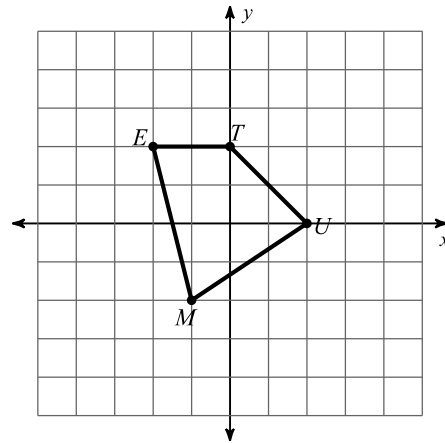
4) dilation of 1.5



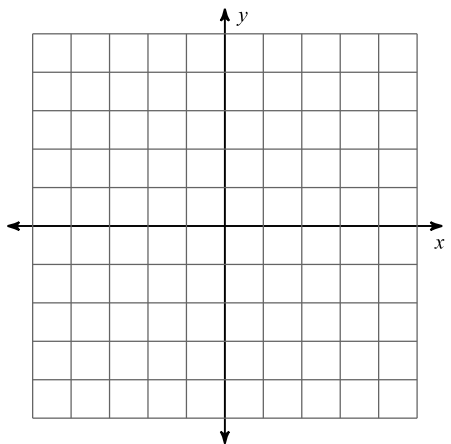
5) dilation of  $\frac{1}{2}$



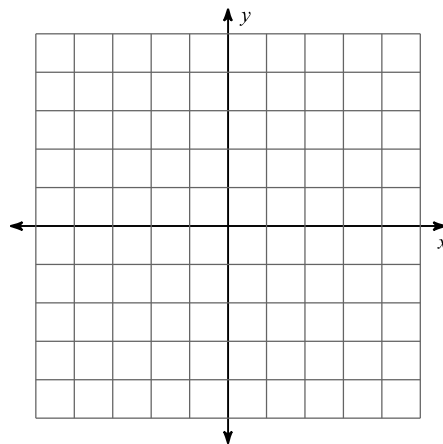
6) dilation of 2



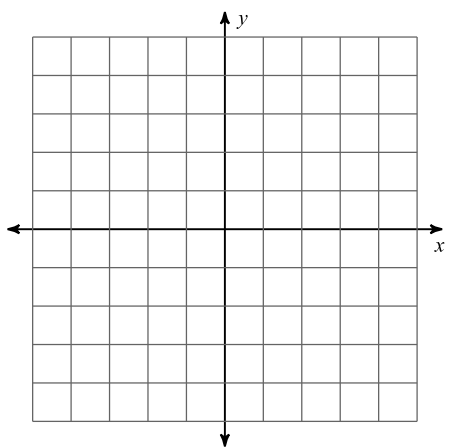
- 7) dilation of 2  
 $K(-1, 0), C(1, 2), U(0, -2)$



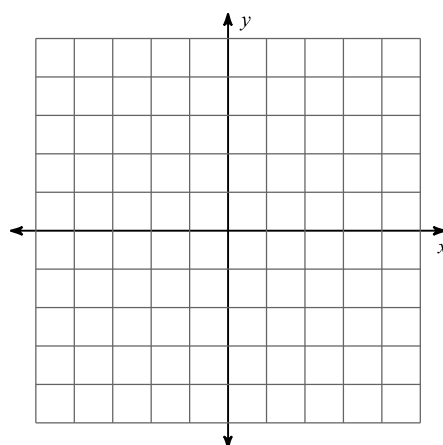
- 8) dilation of 2.5  
 $Z(-1, 0), G(0, 2), E(1, 2), W(-1, -1)$



- 9) dilation of 1.5  
 $L(-1, -1), K(-2, 1), Q(3, 1)$

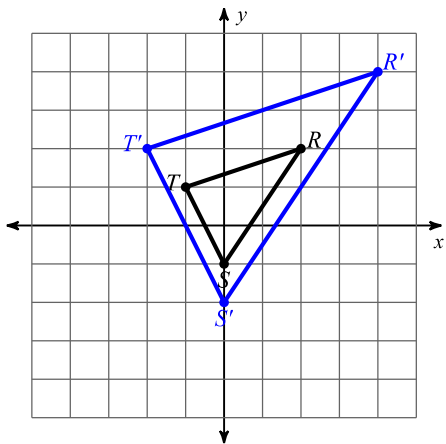


- 10) dilation of  $\frac{1}{4}$   
 $V(-4, 2), M(-4, 4), S(0, 4)$

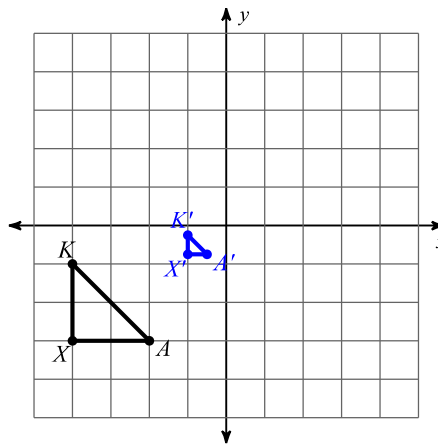


**Write a rule to describe each transformation.**

11)



12)



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

## Dilated Coordinates

T1S1

Find the dilated coordinates with the given scale factor.

1)  $P(-5, -6), Q(-1, 2), R(4, 4), S(1, -3)$

Scale factor = 2

$P'$  : \_\_\_\_\_ ,  $Q'$  : \_\_\_\_\_

$R'$  : \_\_\_\_\_ ,  $S'$  : \_\_\_\_\_

3)  $D(-7, 0), E(-7, -5), F(-2, -5)$

Scale factor =  $\frac{1}{5}$

$D'$  : \_\_\_\_\_ ,  $E'$  : \_\_\_\_\_

$F'$  : \_\_\_\_\_

5)  $S(3, -5), T(0, -2), U(-3, -5), V(0, -8)$

Scale factor = 4

$S'$  : \_\_\_\_\_ ,  $T'$  : \_\_\_\_\_

$U'$  : \_\_\_\_\_ ,  $V'$  : \_\_\_\_\_

7)  $W(-3, 4), X(-8, 1), Y(-4, -3), Z(-1, -5)$

Scale factor = 1.5

$W'$  : \_\_\_\_\_ ,  $X'$  : \_\_\_\_\_

$Y'$  : \_\_\_\_\_ ,  $Z'$  : \_\_\_\_\_

2)  $A(2, 6), B(8, 4), C(6, 10)$

Scale factor =  $\frac{3}{2}$

$A'$  : \_\_\_\_\_ ,  $B'$  : \_\_\_\_\_

$C'$  : \_\_\_\_\_

4)  $Q(-1, 1), R(-3, -1), S(1, -2), T(4, 2)$

Scale factor = 8

$Q'$  : \_\_\_\_\_ ,  $R'$  : \_\_\_\_\_

$S'$  : \_\_\_\_\_ ,  $T'$  : \_\_\_\_\_

6)  $F(-6, -5), G(3, -4), H(3, -7)$

Scale factor =  $\frac{1}{8}$

$F'$  : \_\_\_\_\_ ,  $G'$  : \_\_\_\_\_

$H'$  : \_\_\_\_\_

8)  $J(5, 2), K(-2, -2), L(-4, -6), M(2, -3)$

Scale factor = 0.9

$J'$  : \_\_\_\_\_ ,  $K'$  : \_\_\_\_\_

$L'$  : \_\_\_\_\_ ,  $M'$  : \_\_\_\_\_