Algebra I CC Name_____

Dilations

Date_____ Period____

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

1) dilation of 4.5
$I(-1, 0)$, $M(-1, 1)$, $B(1, 0)$

2) dilation of 0.25
$X(2, -1)$, $G(4, 4)$, $W(4, -1)$

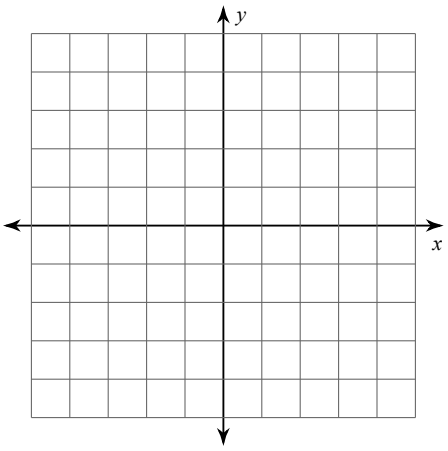
3) dilation of 1.5
$Q(-1, 0)$, $S(-1, 1)$, $Z(2, 0)$

4) dilation of 0.25
$J(0, 4)$, $V(1, 5)$, $G(3, 3)$, $E(-1, 0)$

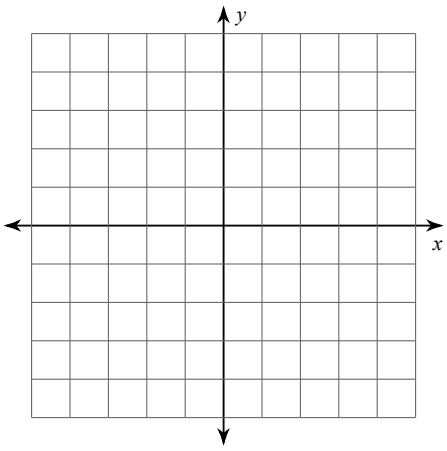
5) dilation of $\frac{3}{2}$
$P(-2, 2)$, $L(-2, 3)$, $I(2, 0)$, $Z(1, -2)$

Graph the image of the figure using the transformation given.

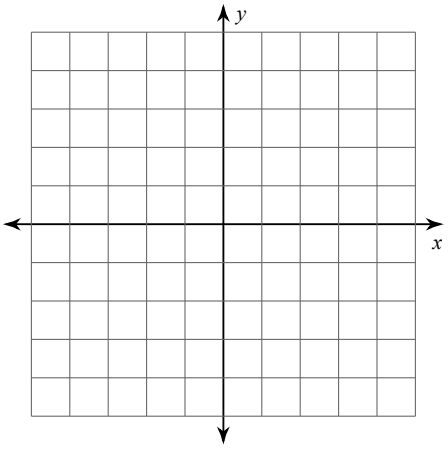
6) dilation of 1.5
$J(-1, -1)$, $U(1, 3)$, $W(0, -2)$



7) dilation of 1.5
$S(-1, 0)$, $V(0, 1)$, $E(3, -3)$

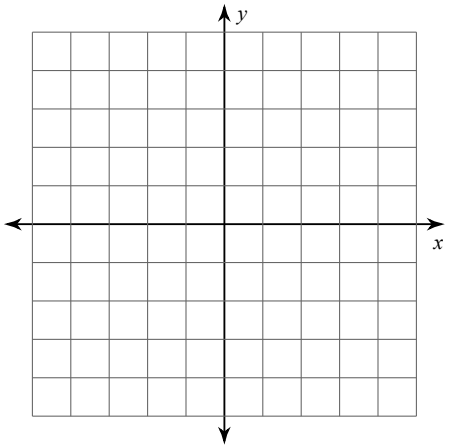


8) dilation of 1.5
$U(0, -2)$, $K(-1, 3)$, $E(1, 2)$, $H(2, -2)$



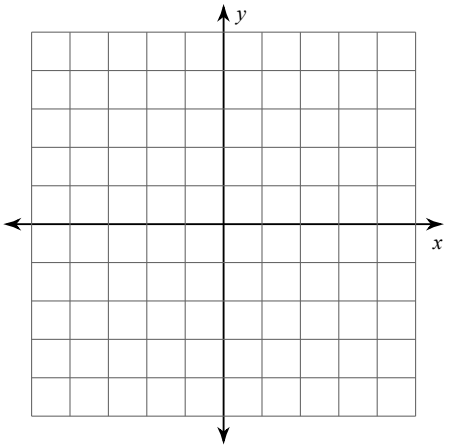
9) dilation of $\frac{1}{2}$

$S(0, 3), T(1, 5), L(5, 2), F(5, 1)$

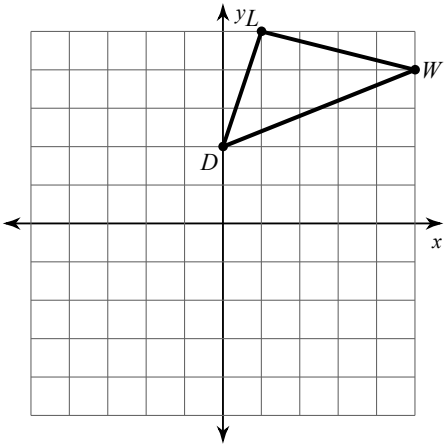


10) dilation of $\frac{3}{2}$

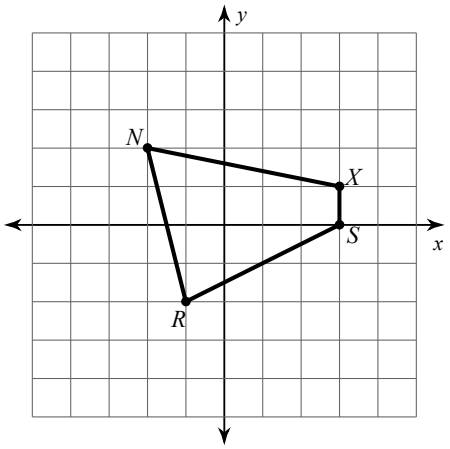
$J(-1, -2), C(-3, 3), Z(1, 3), L(3, 1)$



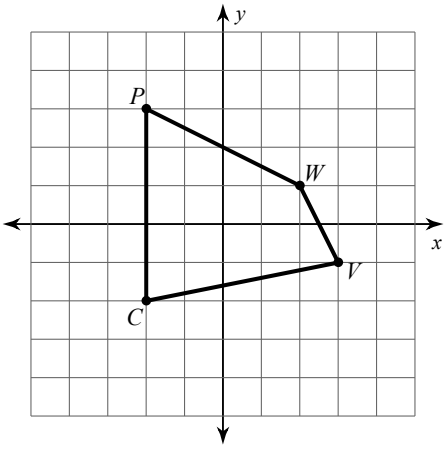
11) dilation of $\frac{1}{2}$



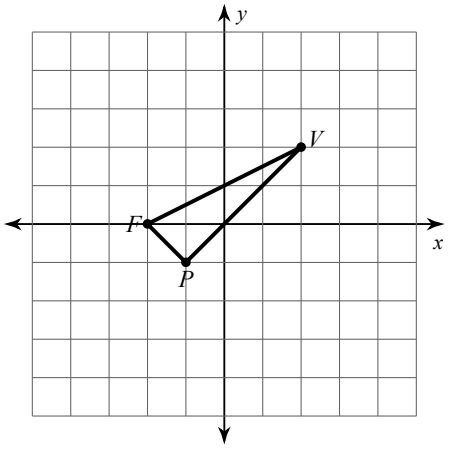
12) dilation of 1.5



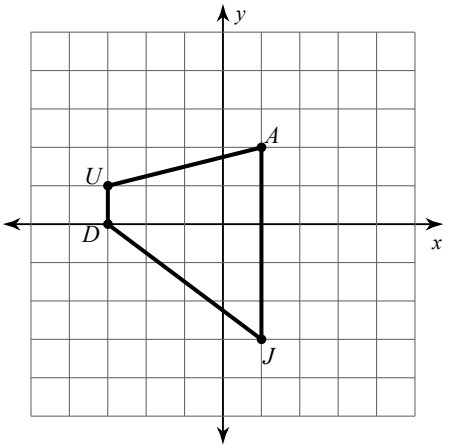
13) dilation of 1.5



14) dilation of 1.5



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



Write a rule to describe each transformation.

16) $U(-2, -1), K(0, 2), F(2, -2)$
to
$U'(-3, -1.5), K'(0, 3), F'(3, -3)$

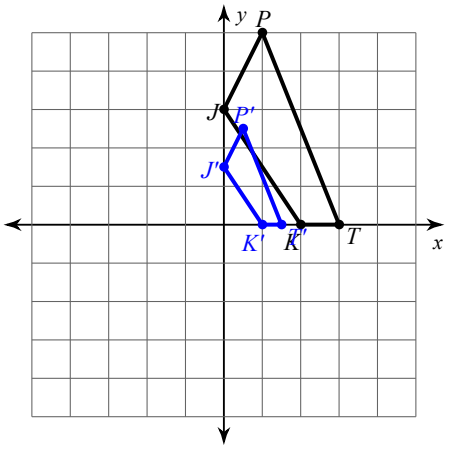
17) $V(-1, -2), K(-1, 3), Y(1, 0)$
to
$V'(-1.5, -3), K'(-1.5, 4.5), Y'(1.5, 0)$

18) $K(-1, -2), U(-2, 2), V(2, 2), Q(2, -1)$
to
$K'(-2, -4), U'(-4, 4), V'(4, 4), Q'(4, -2)$

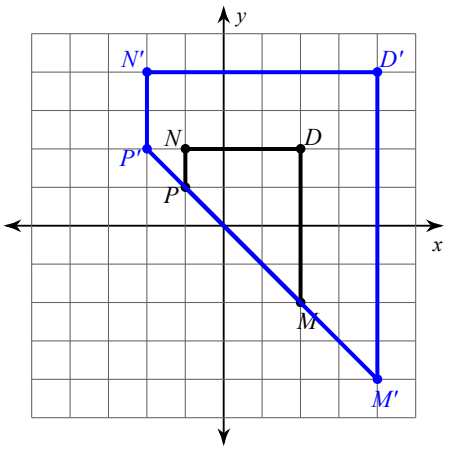
19) $N(-4, 1), T(-5, 3), J(-4, 3), C(-1, 0)$
to
$N'(-1, 0.25), T'(-1.25, 0.75), J'(-1, 0.75), C'(-0.25, 0)$

20) $K(-1, 0), N(-2, 2), H(3, 3), T(3, -2)$
to
$K'(-1.5, 0), N'(-3, 3), H'(4.5, 4.5), T'(4.5, -3)$

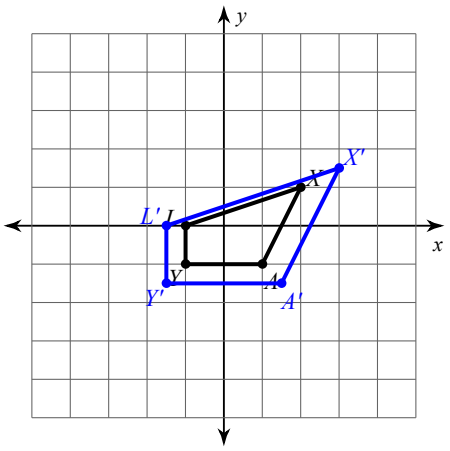
21)



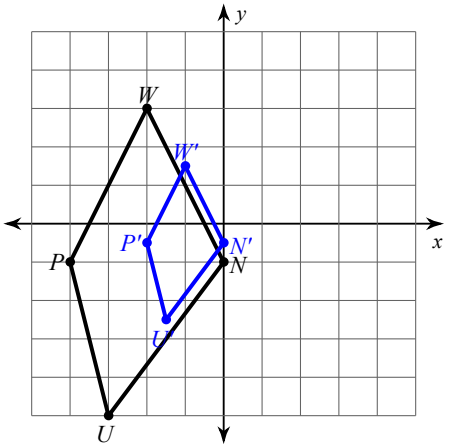
22)



23)



24)



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