Independent Practice (CLASSWORK) Monday 10.1.18 Name: _____

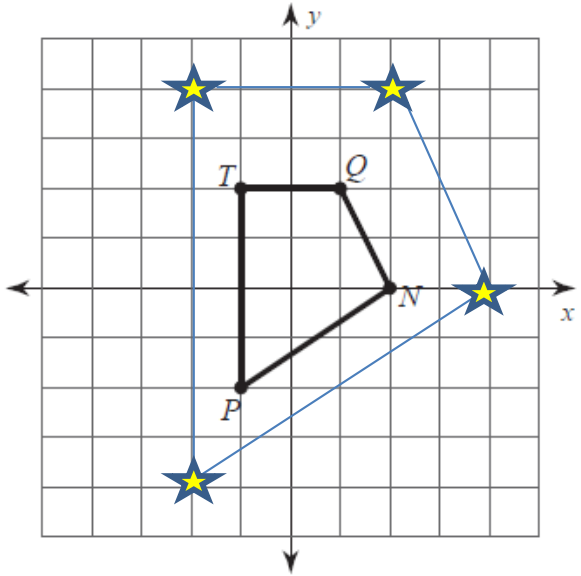
Dilations show us enlargements or reductions. Follow the directions given below:

1. Find your original coordinates for the pre-image (the original figure).
2. Multiply the factor of dilation by the original coordinates, then plot the points AND graph the new figure.

EXAMPLE:

DILATION OF 2

1. **Find the coordinates of the original figure.**
2. **Multiply by the factor of dilation by the original figure's coordinates (in this case – multiply by 2).**
3. **Write your new ordered pairs (New Figure).**
4. **Plot the points and connect each point to create your new figure.**



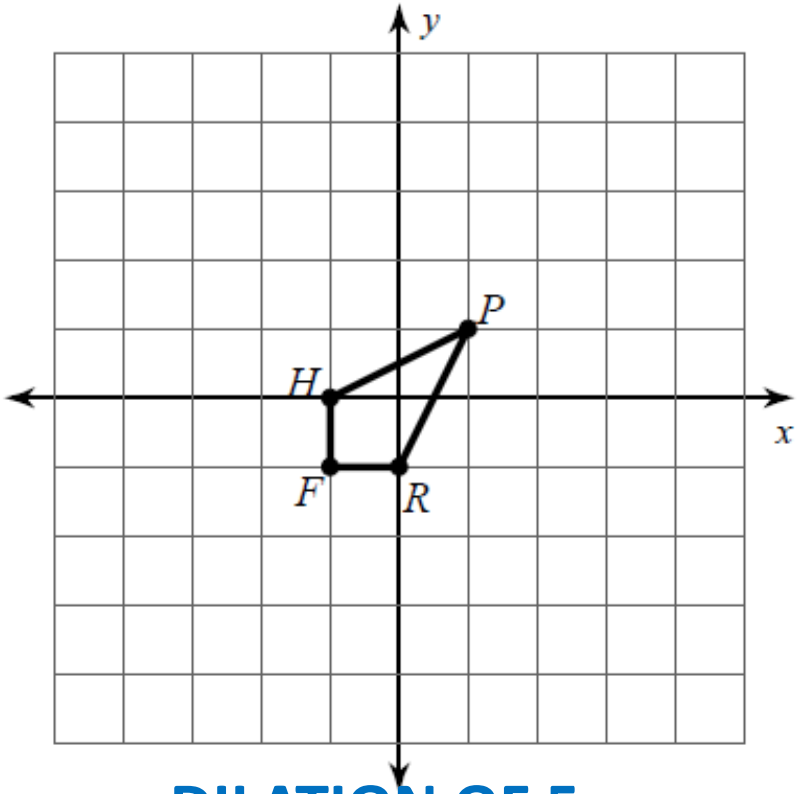
Pre-Image

T	(-1 , 2)
Q	(1 , 2)
N	(2 , 0)
P	(-1 , -2)

Image

T'	(-2 , 4)
Q'	(2 , 4)
N'	(4 , 0)
P'	(-2 , -4)

INTERPRETING YOUR GRAPH: Because the dilation is greater than ___ , your new image will be _____ than the original, in this case _____ the size of the original.



DILATION OF 5

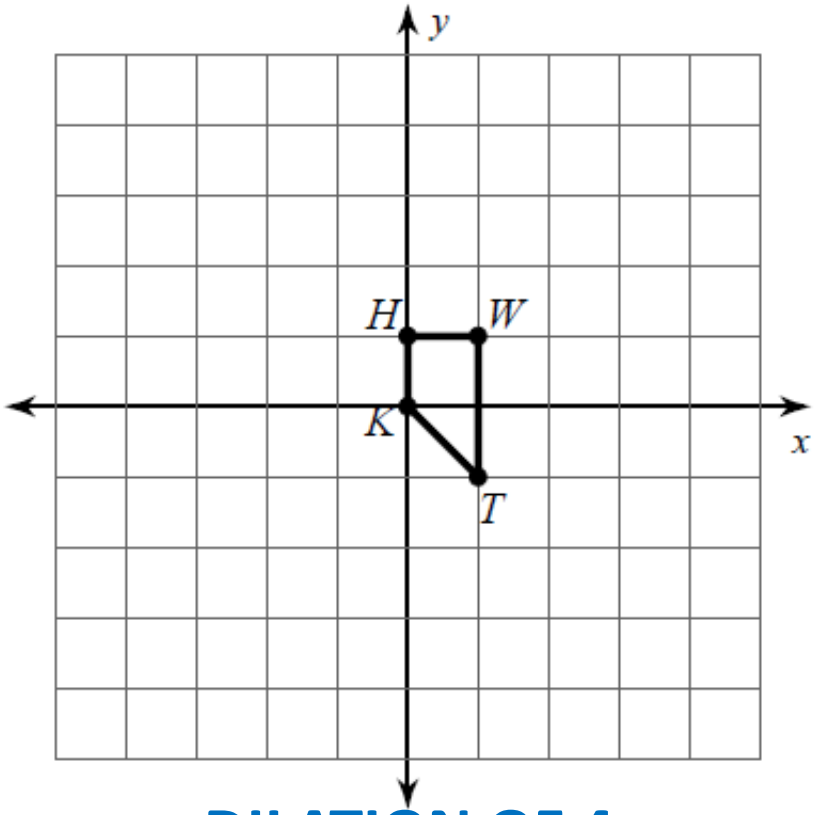
Pre-Image

P	(,)
R	(,)
F	(,)
H	(,)

Image

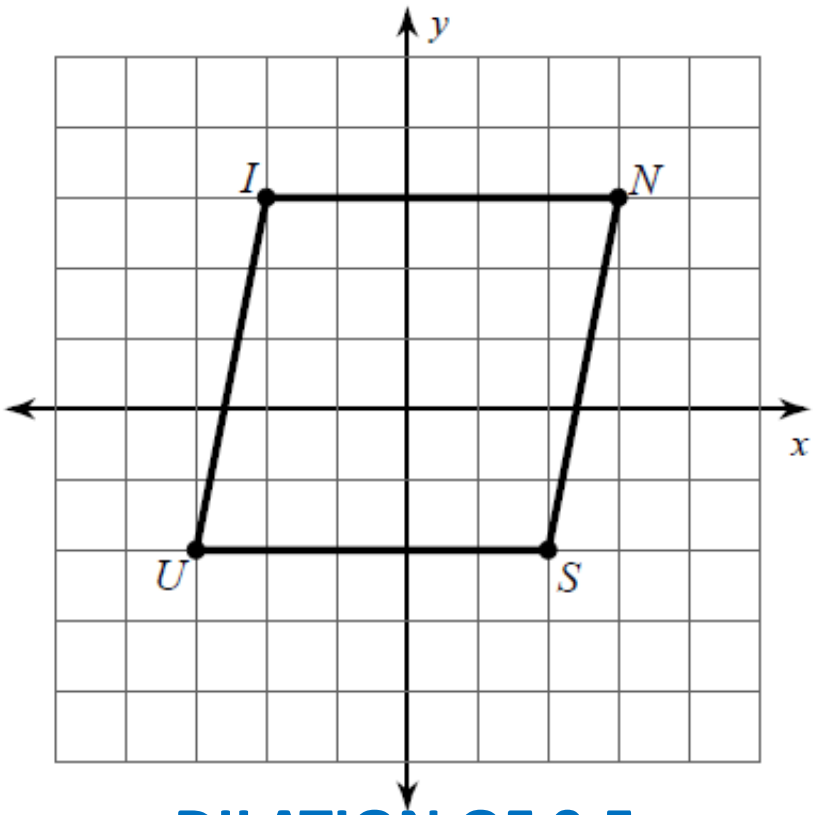
P'	(,)
R'	(,)
F'	(,)
H'	(,)

DILATIONS (Similar Figures / Proportions) 10.1.18 Name: _____ Per. __



DILATION OF 4

Original Figure		New Figure
H (,)		H’ (,)
K (,)	→	K’ (,)
W (,)		W’ (,)
T (,)		T’ (,)

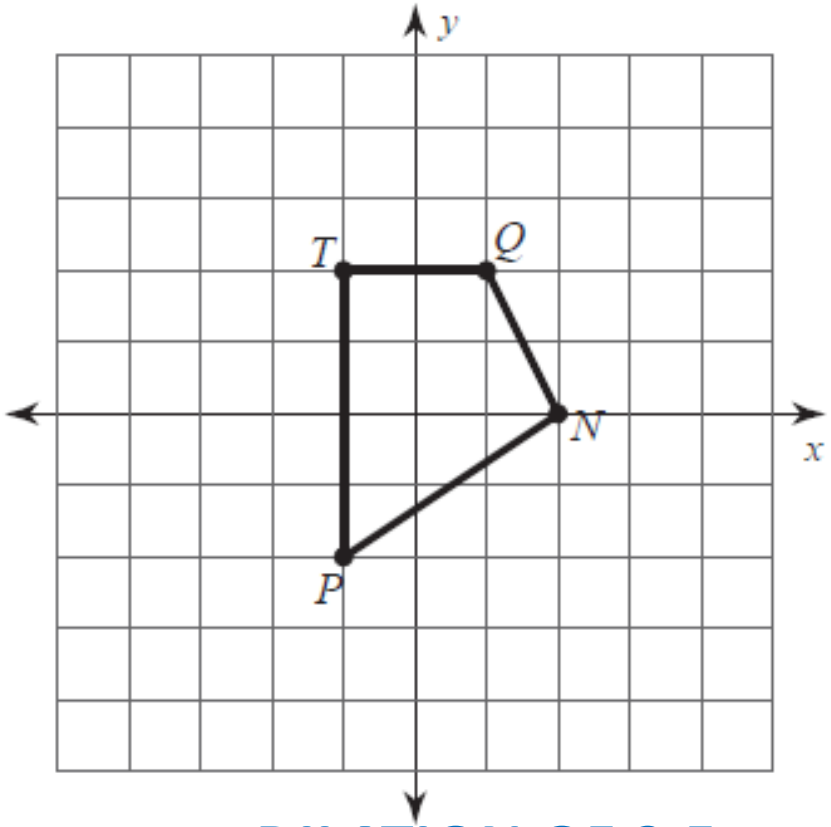


DILATION OF 0.5

Original Figure		New Figure
I (,)		I’ (,)
N (,)	→	N’ (,)
S (,)		S’ (,)
U (,)		U’ (,)

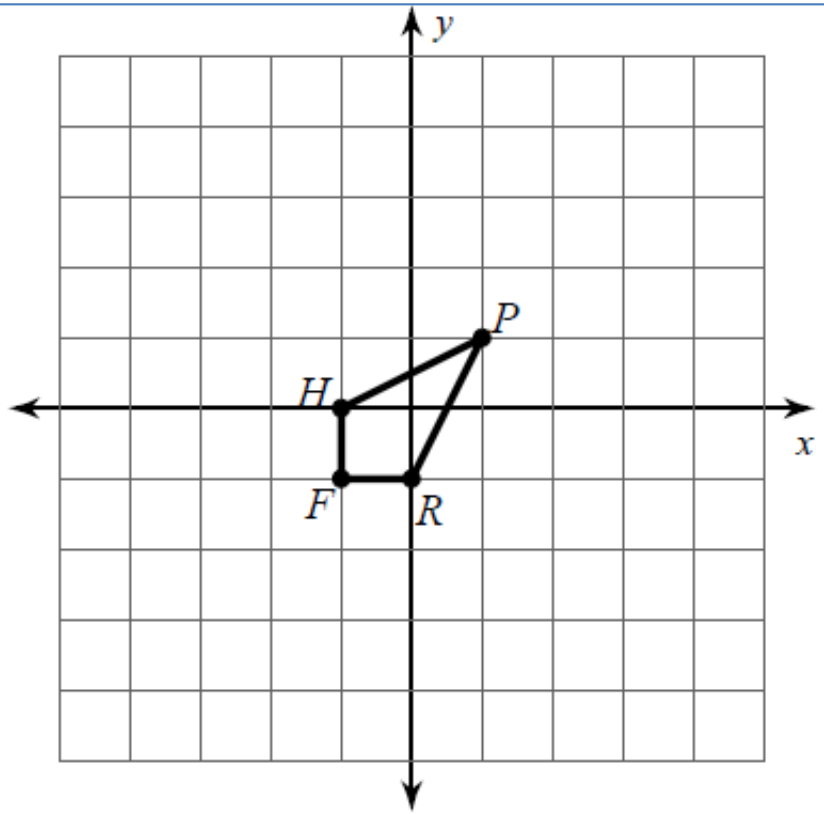
Directions: You must complete both sets of Coordinates. Sketch new figure labeling new points on graph above.

DILATIONS (Similar Figures / Proportions) 10.1.18 Name: _____ Per. __



DILATION OF 2.5

Original Figure		New Figure
T (,)		T’ (,)
Q (,)	→	Q’ (,)
N (,)		N’ (,)
P (,)		P’ (,)

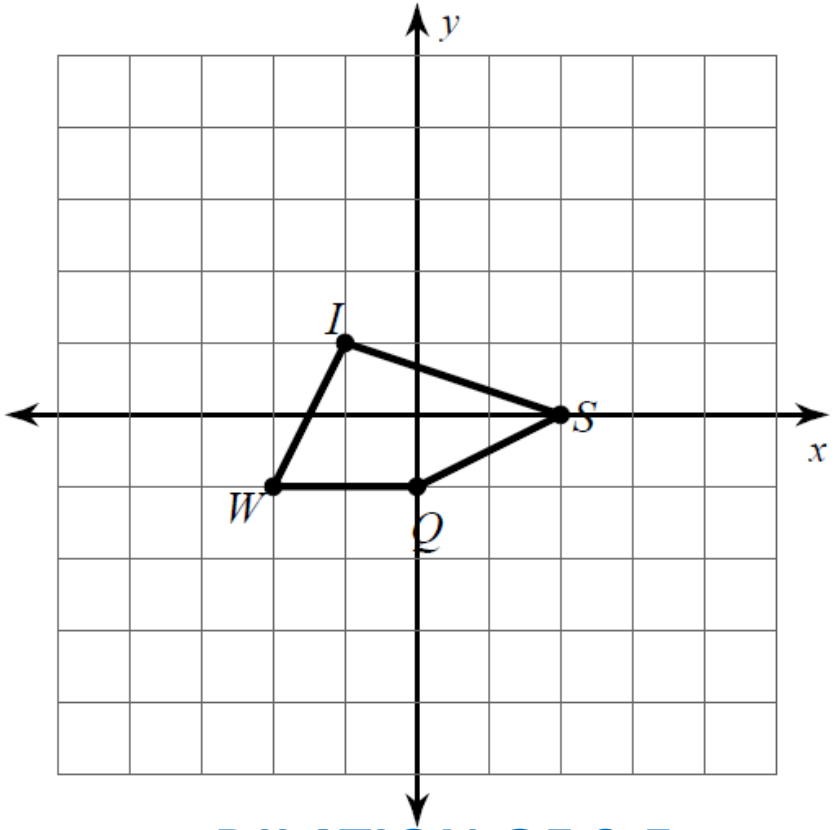


DILATION OF 3

Original Figure		New Figure
P (,)		P’ (,)
R (,)	→	R’ (,)
F (,)		F’ (,)
H (,)		H’ (,)

Directions: You must complete both sets of Coordinates. Sketch new figure labeling new points on graph above.

DILATIONS (Similar Figures / Proportions) 10.1.18 Name: _____ Per. __



DILATION OF 2.5

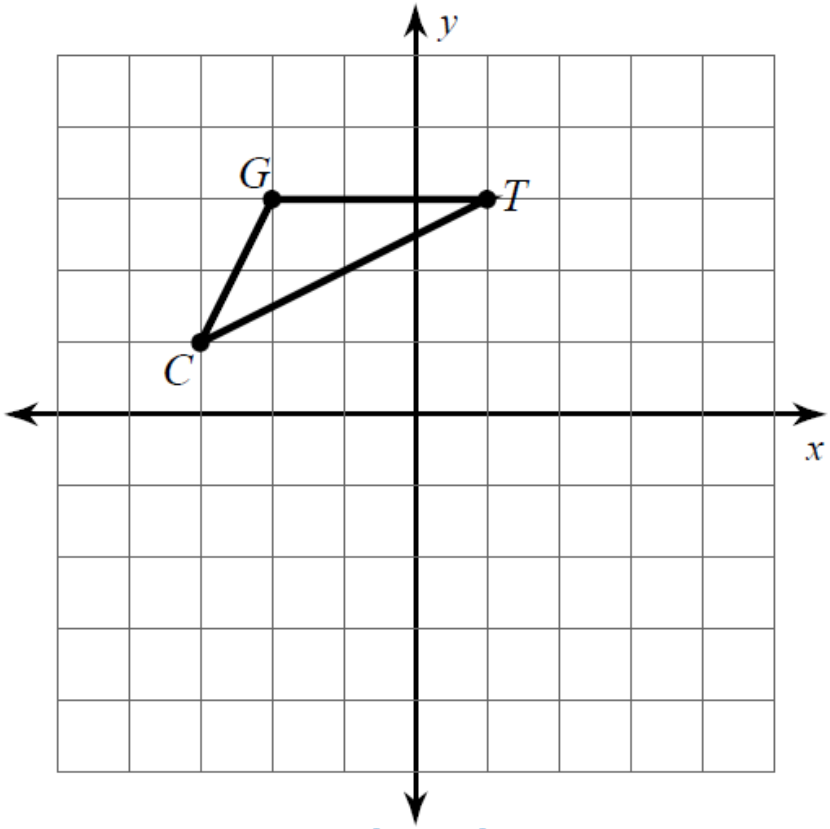
Original Figure → New Figure

I (,) → I' (,)

S (,) → S' (,)

Q (,) → Q' (,)

W (,) → W' (,)



DILATION OF 1.5

Original Figure → New Figure

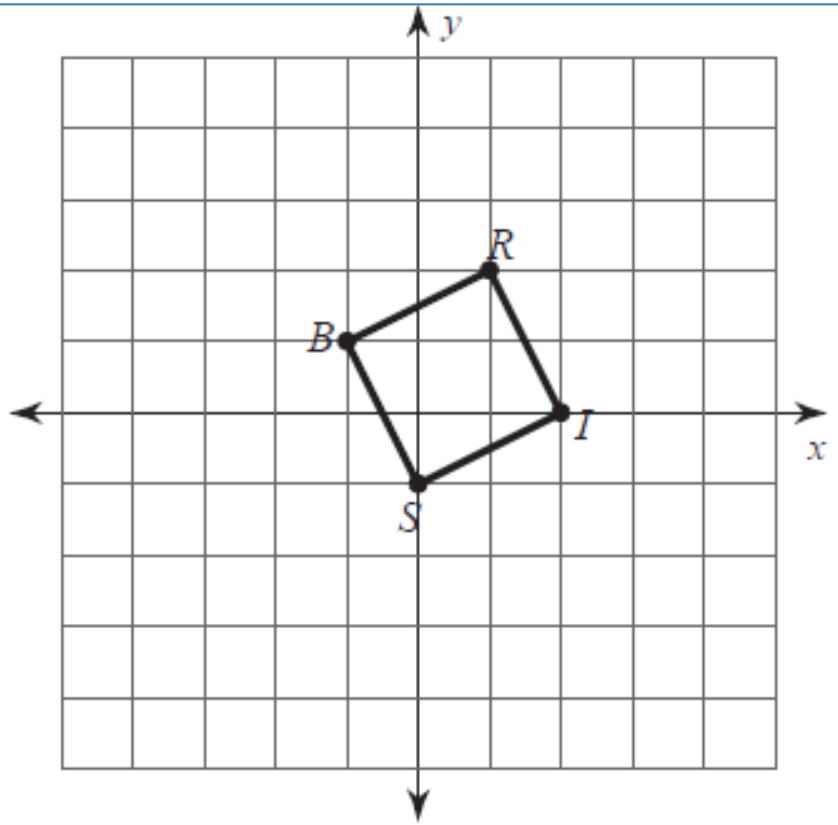
G (,) → G' (,)

T (,) → T' (,)

C (,) → C' (,)

Directions: You must complete both sets of Coordinates. Sketch new figure labeling new points on graph above.

DILATIONS (Similar Figures / Proportions) 10.1.18 Name: _____ Per. __



DILATION OF 2

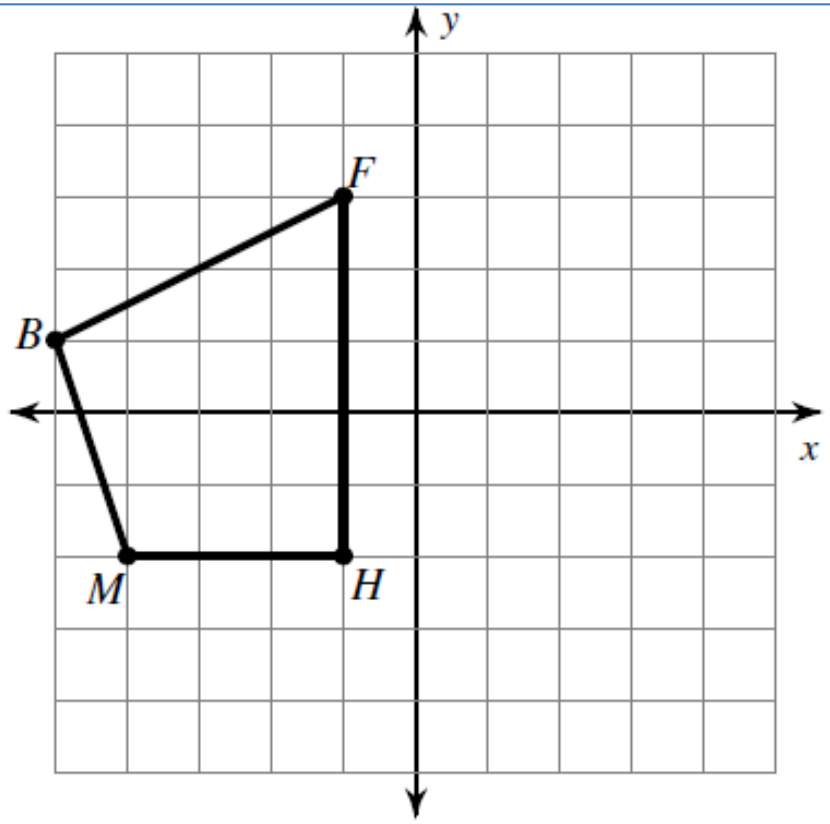
Original Figure → New Figure

R (,) → R' (,)

I (,) → I' (,)

S (,) → S' (,)

B (,) → B' (,)



DILATION OF 0.5

Original Figure → New Figure

F (,) → F' (,)

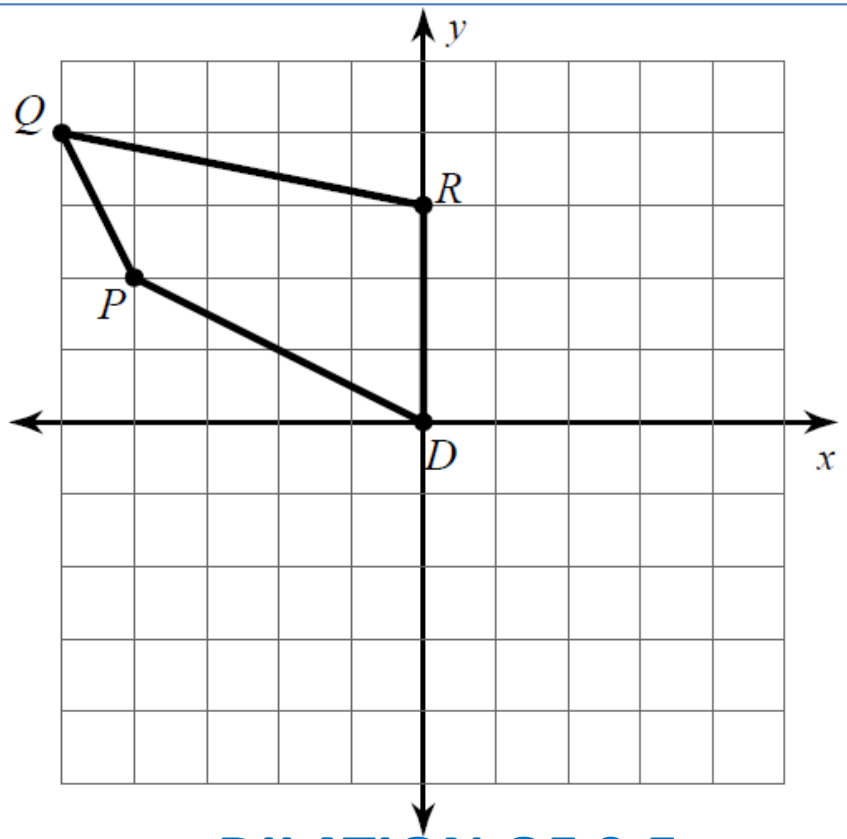
H (,) → H' (,)

M (,) → M' (,)

B (,) → B' (,)

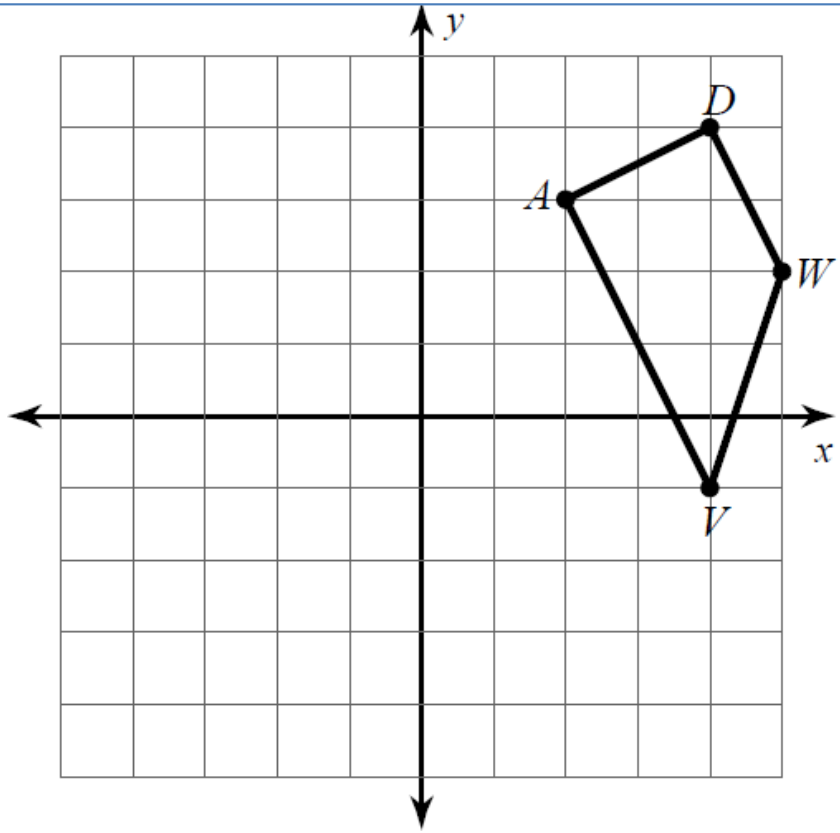
Directions: You must complete both sets of Coordinates. Sketch new figure labeling new points on graph above.

DILATIONS (Similar Figures / Proportions) 10.1.18 Name: _____ Per. __



DILATION OF 0.5

Original Figure		New Figure
Q (,)		Q’ (,)
R (,)	→	R’ (,)
D (,)		D’ (,)
P (,)		P’ (,)



DILATION OF 0.5

Original Figure		New Figure
A (,)		A’ (,)
D (,)	→	D’ (,)
W (,)		W’ (,)
V (,)		V’ (,)

Directions: You must complete both sets of Coordinates. Sketch new figure labeling new points on graph above.