Do Now:

1. The coordinates of point A (-4, 2), are reflected over the x – axis. What are the coordinates of A'?

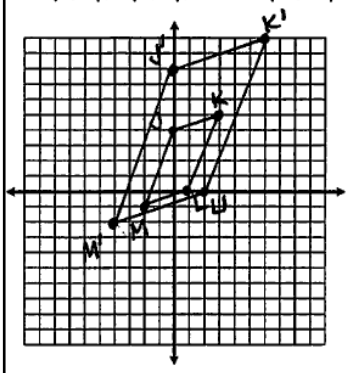
A'(-4, -2)

2. The coordinates of Point Q (-5, 6), are rotated 180 about the origin. What are the coordinates of Q'?

(x,y) → (-x,-y) Q'(5, -6)

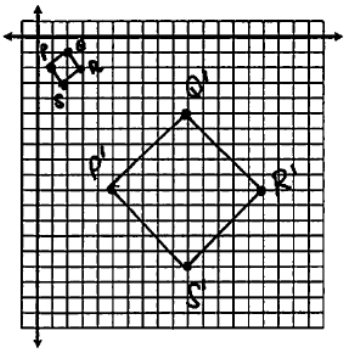
Sep 3-9:31 PM

1. Parallelogram *JKLM* with vertices *J*(0, 4), *K*(3, 5), *L*(1, 0), and *M*(-2, -1): **k = 2**



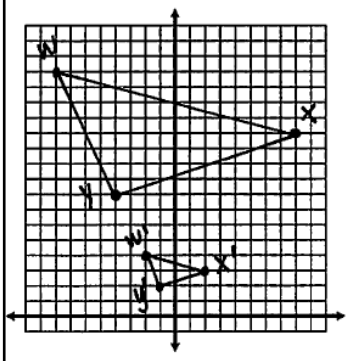
J'(0 , 8)
K'(6 , 10)
L'(2 , 0)
M'(-4 , -2)

2. Square *PQRS* with vertices *P*(1, -2), *Q*(2, -1), *R*(3, -2), and *S*(2, -3): **k = 5**



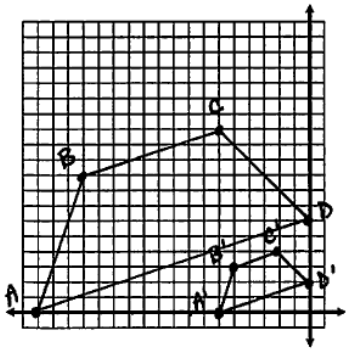
P'(5 , -10)
Q'(10 , -5)
R'(15 , -10)
S'(10 , -15)

3. Triangle *WXY* with vertices *W*(-8, 16), *X*(8, 12), and *Y*(-4, 8): **k = 1/4**



W'(-2 , 4)
X'(2 , 3)
Y'(-1 , 2)

4. Trapezoid *ABCD* with vertices *A*(-18, 0), *B*(-15, 9), *C*(-6, 12), and *D*(0, 6): **k = 1/3**



A'(-6 , 0)
B'(-5 , 3)
C'(-2 , 4)
D'(0 , 2)

Feb 15-7:03 AM

Find the image point for a Dilation

1) What is G' if G (-3, 4) is dilated with a scale factor of 3?

$k=3$ $G'(-9, 12)$

2) What is T' if T(-6, -9) is dilated with a scale factor of 1/3?

$k=\frac{1}{3}$ $T'(-2, -3)$

Multiply x & y by the k-factor

Feb 9-11:39 AM

Finding the k value(Scale factor) for Dilations

3) F (3, -2) → F'(6, -4). What is the value of k?

$\frac{\text{Image}}{\text{Pre-Image}}$ Chose x or y $\frac{6}{3}=2$ $\boxed{k=2}$

4) H (-8, -4) → H' (-4, -2). What is the value of k?

$\frac{\text{Image}}{\text{Pre-Image}}$ $\frac{-4}{-8}=.5=\frac{1}{2}$ $\boxed{k=\frac{1}{2}}$

Feb 9-11:39 AM

Finding Image Points

5) R (-5, 2) → R'(-10, 4). What is P', the image of P (-3, -2)?

$\frac{-10}{-5} = 2$

$k = 2$

$\boxed{P'(-6, -4)}$

6) A (0, -12) → A'(0, -4). What is V', the image of V (-6, -9)?

$\frac{-4}{-12} = \frac{1}{3}$ $k = \frac{1}{3}$

$V'(-2, -3)$

Feb 12-6:58 AM

BigQ