

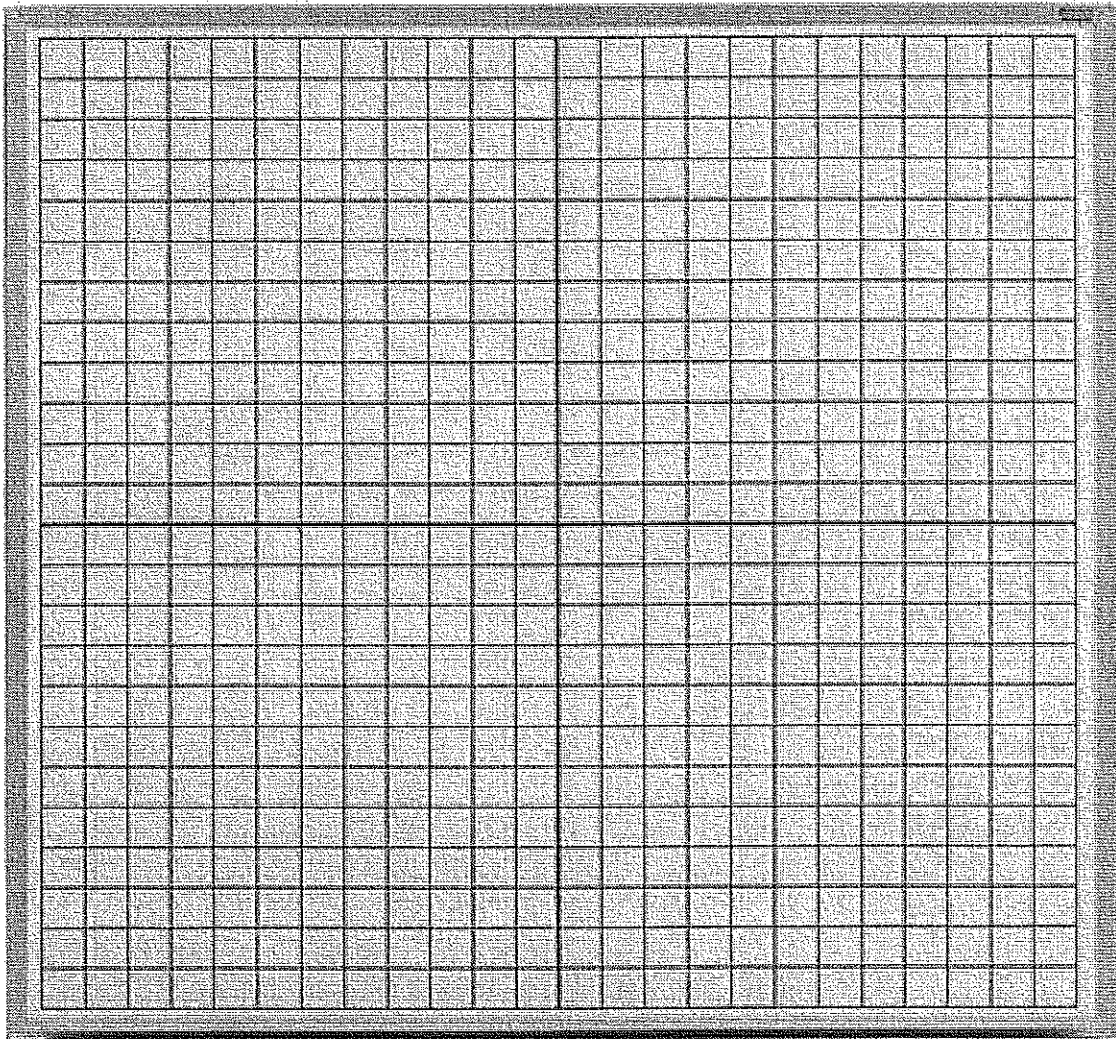
Transformations Project NAME _____

REFLECTION

1. Draw any shape/picture in the grid that you like using a color. Be sure to write that color in the key space. DO NOT FORGET TO LABEL POINTS WITH LETTERS.
2. Pick another color and reflect that shape/picture over the X AXIS. Be sure to write that color in the key space. DO NOT FORGET TO LABEL YOUR LETTERS WITH PRIMES.
3. Pick another color and reflect the NEW shape/picture over the Y AXIS. Be sure to write that color in the key space. DO NOT FORGET TO LABEL YOUR LETTERS WITH DOUBLE PRIMES.

KEY: Original Shape Reflect X axis Reflected Y axis

Pick 1

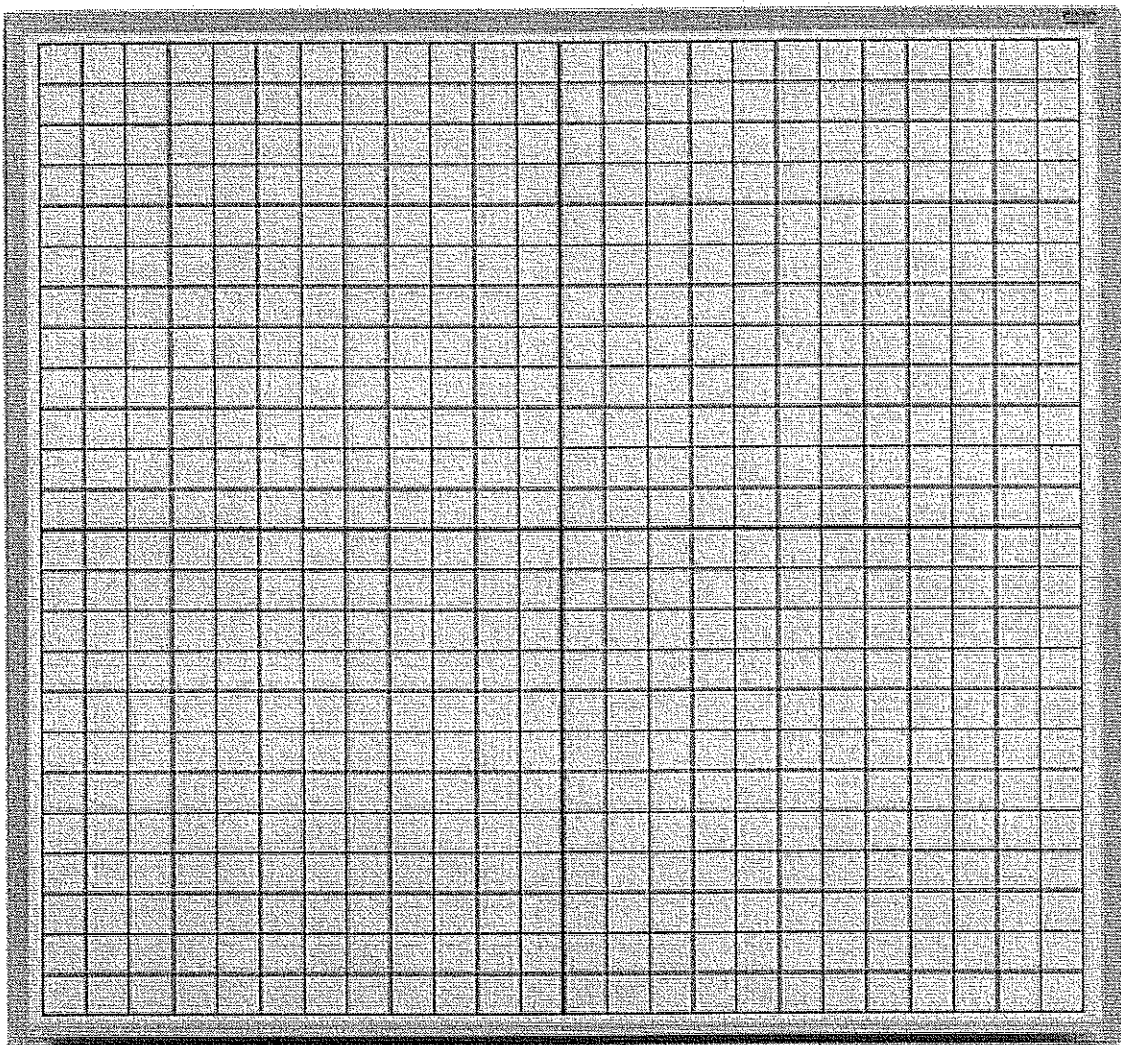


ROTATION

1. Draw any shape/picture in the grid that you like using a color. Be sure to write that color in the key space. **DO NOT FORGET TO LABEL POINTS WITH LETTERS.**
2. Pick another color and rotate that shape/picture 90 degrees counterclockwise. Be sure to write that color in the key space. **DO NOT FORGET TO LABEL YOUR LETTERS WITH PRIMES.**
3. Pick another color and rotate the NEW shape/picture 180 degrees. Be sure to write that color in the key space. **DO NOT FORGET TO LABEL YOUR LETTERS WITH DOUBLE PRIMES.**

KEY: Original Shape Rotate 90° Rotate 180°

Pick 1

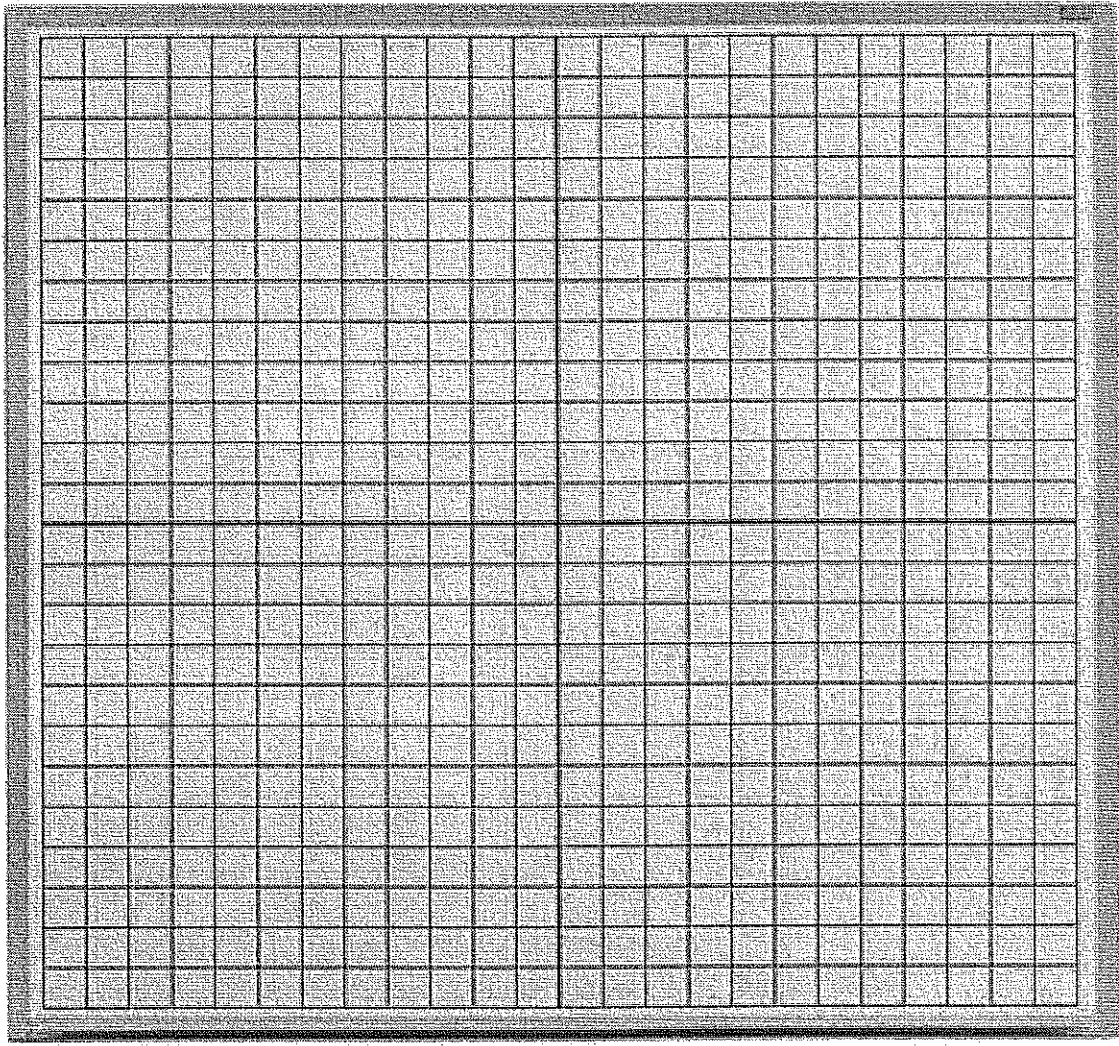


Translation

1. Draw any shape/picture in the grid that you like using a color. Be sure to write that color in the key space. DO NOT FORGET TO LABEL POINTS WITH LETTERS.
2. Pick another color and translate it by a point of your choice (,). Be sure to write that color in the key space. DO NOT FORGET TO LABEL YOUR LETTERS WITH PRIMES. When you choose your point, make sure it is not going to go off the grid.
3. Pick another color and translate the NEW shape/picture by a point of your choice (,) other than the first point. Be sure to write that color in the key space. DO NOT FORGET TO LABEL YOUR LETTERS WITH PRIMES. When you choose your point, make sure it is not going to go off the grid.

KEY: Original Shape Translate (,) Translate (,)

Careful : make sure it stays on the graph.



Dilation

1. Draw any shape/picture in the grid that you like using a color BUT be sure to points that will be easy to divide by 2 and will be able to multiply by 2 and still fit in the grid space. Be sure to write that color in the key space. DO NOT FORGET TO LABEL POINTS WITH LETTERS.
2. Pick another color and Dilate your shape by a scale factor of $\frac{1}{2}$. Be sure to write that color in the key space. DO NOT FORGET TO LABEL YOUR LETTERS WITH PRIMES.
3. Pick another color and dilate your NEW shape by a scale factor of 2. Be sure to write that color in the key space. DO NOT FORGET TO LABEL YOUR LETTERS WITH PRIMES.

KEY: Original Shape Dilate by $\frac{1}{2}$ Dilate by 2

Pick 1

Reminder (All points need to be even for $\frac{1}{2}$)

