

# Geometry

3-24-10

## Second Transformation

①

Reflection: a "Flip" or mirror image. It reversed the orientation of the preimage.

It's an isometry.

To Reflect points on a graph:

- 1.) Count # of units from each point to the "line of reflection."
- 2.) The Image will be the same # of units past the line of reflection, on the opposite side.

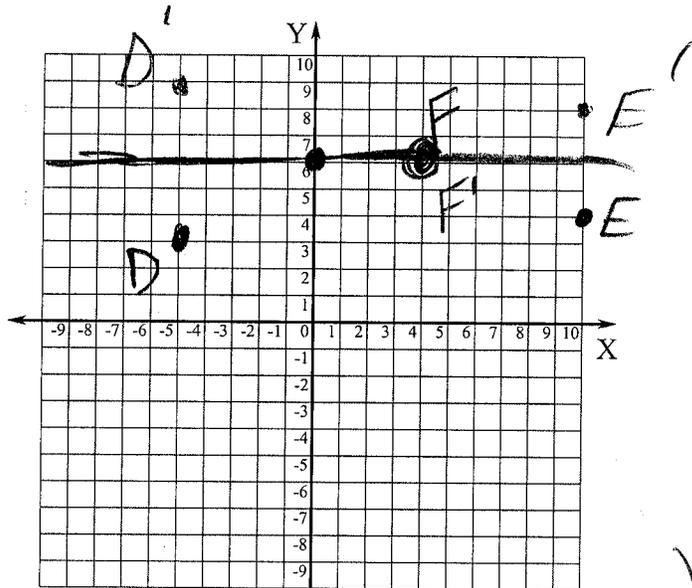
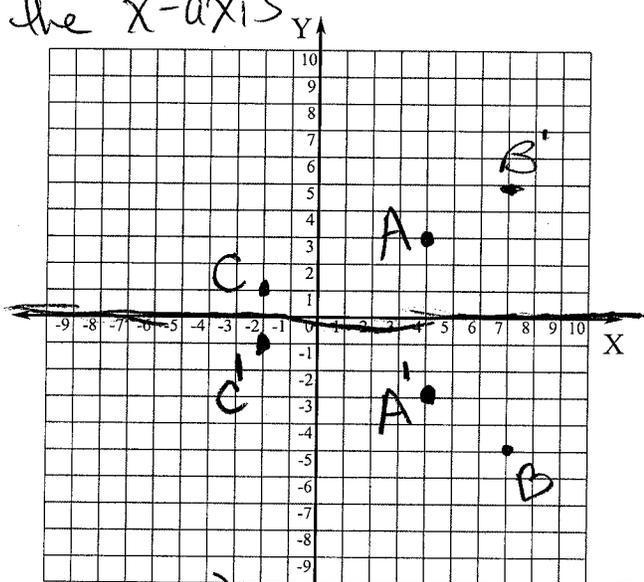
Tips:

- \* x-axis runs Left-to-Right
- \* y-axis runs up-and-down
- \*  $x =$  equations are vertical
- \*  $y =$  equations are horizontal
- \* points on the line of Reflection Don't Move

# Reflections

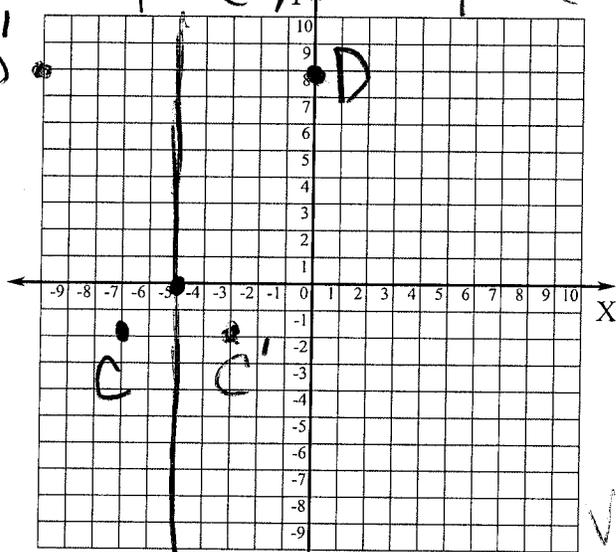
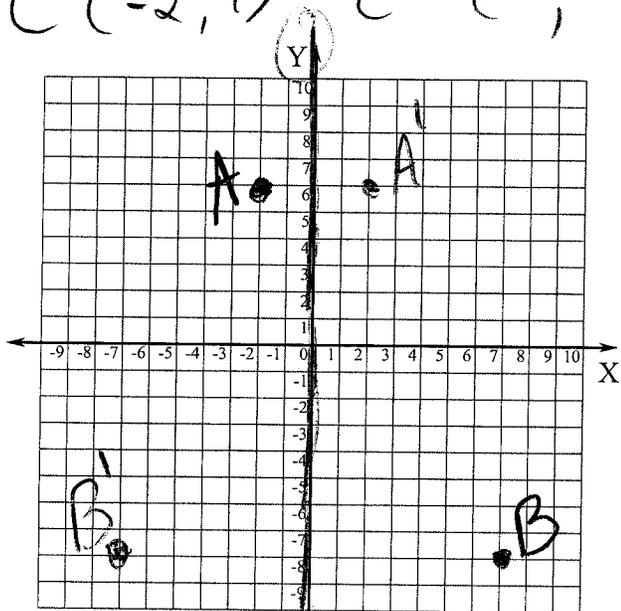
Line of reflection, mirror is the x-axis

mirror is line  $y=6$



$A(4, 3)$        $A'(4, -3)$   
 $B(7, -5)$      $B'(7, 5)$   
 $C(-2, 1)$      $C'(-2, -1)$

$D(-5, 3)$      $D'(-5, 9)$   
 $E(10, 4)$      $E'(10, 8)$   
 $F(4, 6)$       $F'(4, 6)$



Mirror is y-axis

$A(-2, 6)$      $A'(2, 6)$   
 $B(7, -8)$      $B'(-7, -8)$

Reflect over  $x=-5$  Line

$C(-7, -2)$      $C'(-3, -2)$   
 $D(0, 8)$        $D'(-10, 8)$