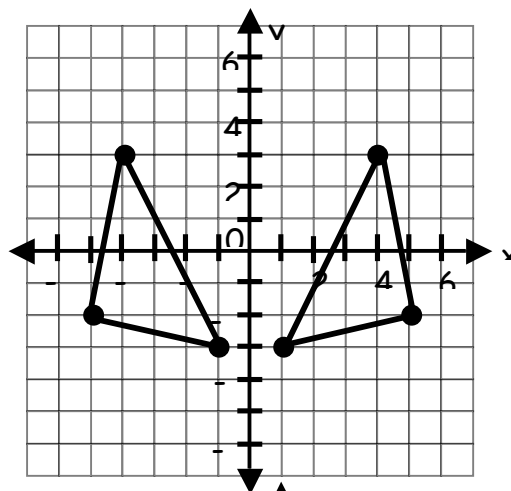
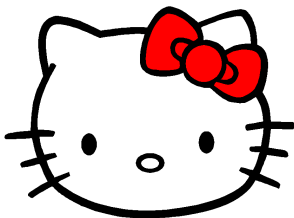


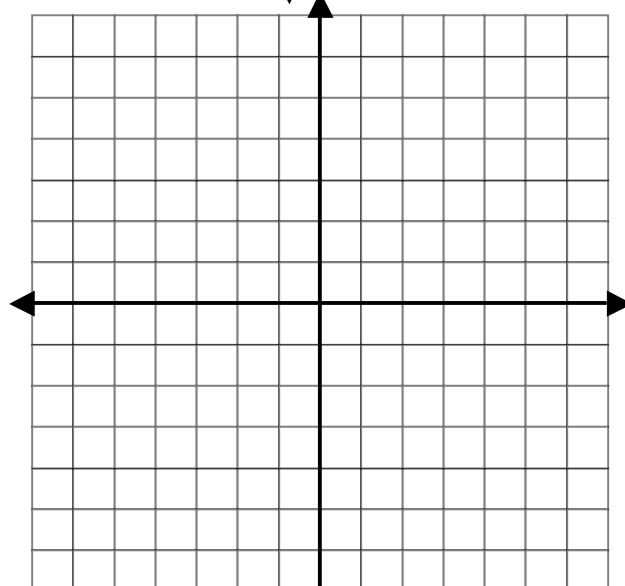
# P.S. #6.2 - Reflections

Name: \_\_\_\_\_ Class: \_\_\_\_\_

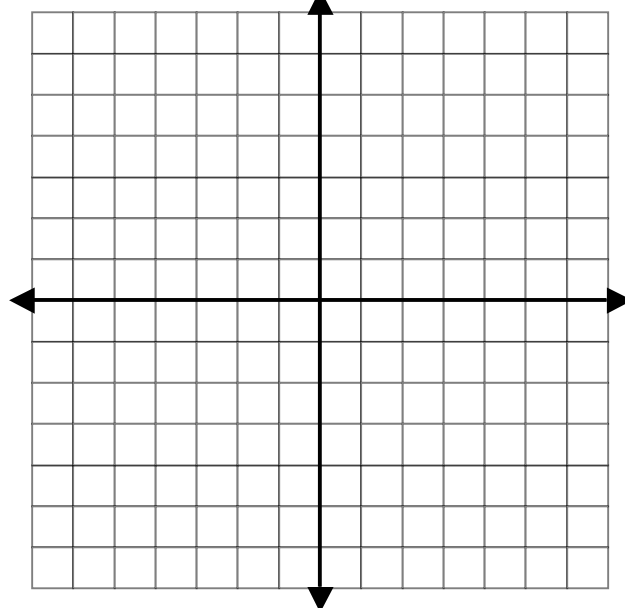
- 1.) Which transformation is shown?  
 (A) reflection in the  $x$ -axis  
 (B) reflection in the  $y$ -axis  
 (C) reflection in the line  $y = x$   
 (D) reflection in the line  $y = 1$



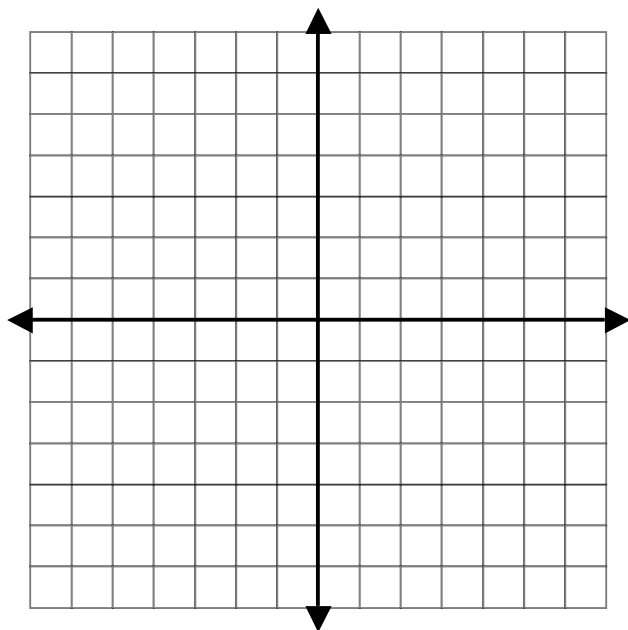
- 2.) Draw parallelogram  $SEAN$  with coordinates  $S(1,-1)$ ,  $E(1,-5)$ ,  $A(5,-4)$ , and  $N(5,0)$ .
- Draw a reflection of  $SEAN$  in the  $x$ -axis. Label the vertices of each image. What are the new coordinates?
  - Draw a reflection of  $S'E'A'N'$  in the  $y$ -axis. Label the vertices of each image. What are the new coordinates?



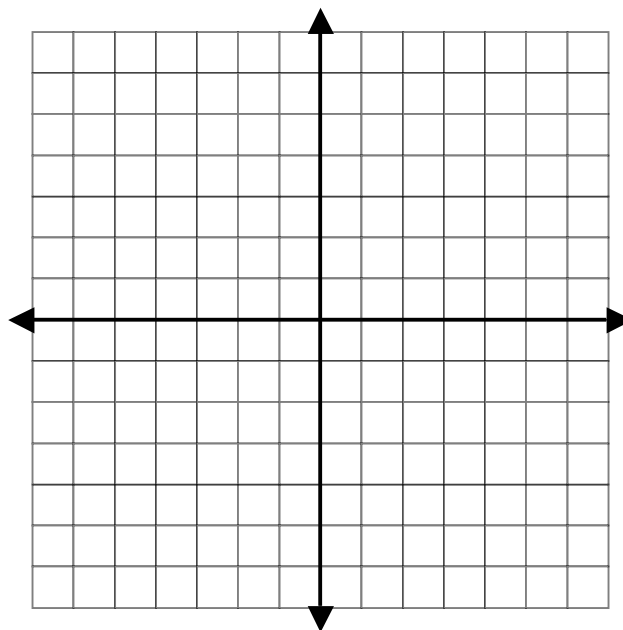
- 3.) Graph  $\triangle SAM$  with coordinates  $S(0,3)$ ,  $A(2,5)$ , and  $M(1,7)$  on the set of axes to the right. Reflect  $\triangle SAM$  over the line  $y = x$ . What are the coordinates of the image?



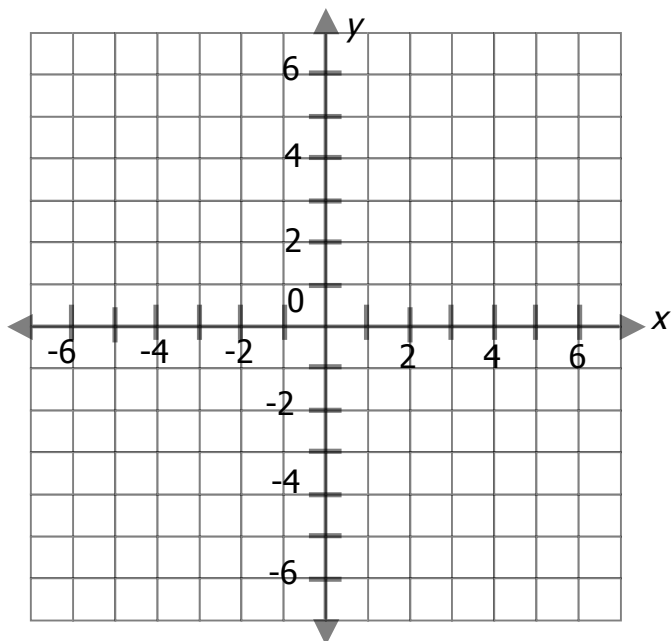
- 4.) Reflect rectangle  $ALEX$  with coordinates  $A(-3,1)$ ,  $L(-3,5)$ ,  $E(0,5)$ , and  $X(0,1)$  over the line  $x = 1$ . State the coordinates of the image.



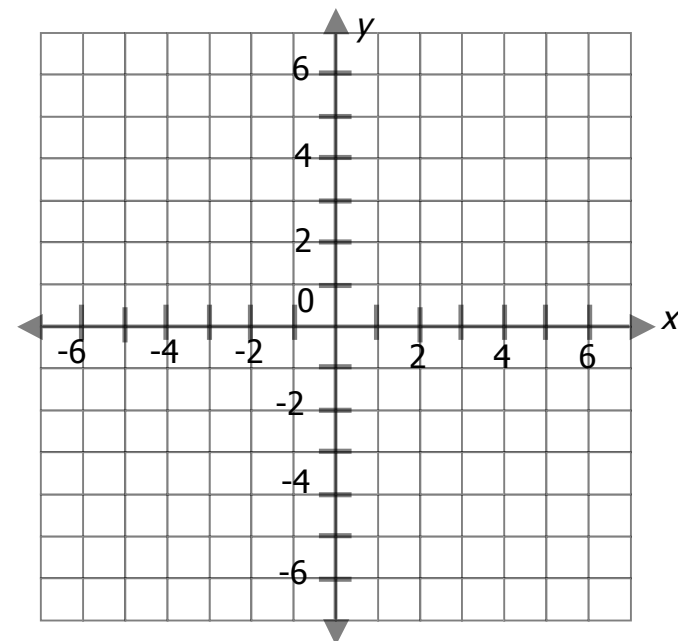
- 5.) Reflect  $\triangle BRI$  with coordinates  $B(1,1)$ ,  $R(-2,1)$ , and  $I(-4,-3)$  over the line  $y = 2$ . State the coordinates of the image.



- 6.) Reflect pentagon  $BERAD$  with coordinates  $B(-1,3)$ ,  $E(2,5)$ ,  $R(4,4)$ ,  $A(4,1)$ ,  $D(2,1)$  over the line  $x = -1$ . State the coordinates of the image.



- 7.) Graph  $\triangle IAN$  with coordinates  $I(-3,1)$ ,  $A(-7,-2)$ , and  $N(-3,-2)$ . Graph  $\triangle IAN$  after a reflection in the line  $y = -x$ . State the coordinates of the image.



8.) Solve for x:  $8(x + 2) - 3(x - 4) = 6(x - 7) + 8$



9.) Write the following numbers in scientific notation.

a.) 3,950,000

b.) 0.0081

10.) Write the following numbers in standard notation.

a.)  $4.5 \times 10^8$

b.)  $2.1 \times 10^{-4}$

11.) Multiply (without a calculator).

$$(5 \times 10^3)(4 \times 10^7)$$

12.) Draw a smiley face because you are done with PS #6.2! ☺