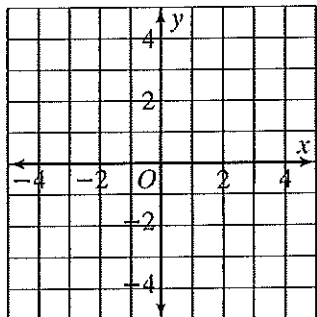


Practice 9-9

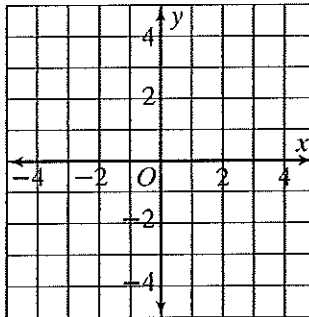
Symmetry and Reflections

The vertices of a polygon are listed. Graph each polygon and its image after a reflection over the given line. Name the coordinates of the image.

1. $A(1, 3), B(4, 1), C(3, -2), D(2, -4); x = 0$



2. $J(-2, 1), K(1, 3), L(4, 2); y = -1$



A' _____ B' _____

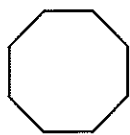
J' _____ K' _____

C' _____ D' _____

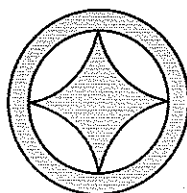
L' _____

Draw all the lines of symmetry for each figure.

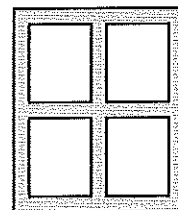
3.



4.

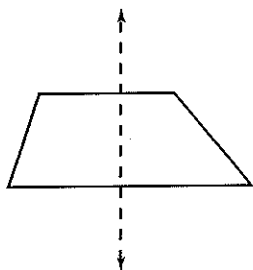


5.

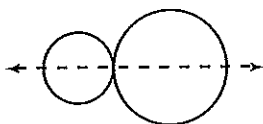


Is the dashed line a line of symmetry? Write yes or no.

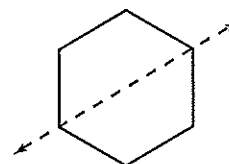
6. _____



7. _____



8. _____



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Reteaching 9-9

Symmetry and Reflections

Graph the polygon's image after a reflection over the line $x = 1$. Name the coordinates of the image.

Graph $x = 1$.

Point A is 1 unit left of $x = 1$.

Plot A' with the same y -coordinate and 1 unit right of $x = 1$.

Point B is 3 units left of $x = 1$.

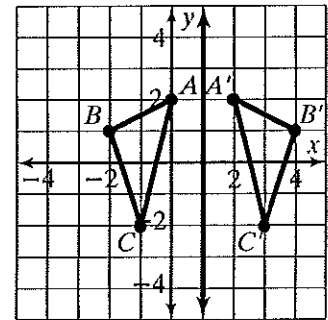
Plot B' 3 units right of $x = 1$.

Point C is 2 units left of $x = 1$.

Plot C' 2 units right of $x = 1$.

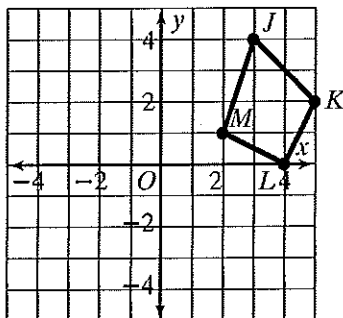
Read the coordinates.

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



Graph each polygon's image after a reflection over the given line. Name the coordinates of the image.

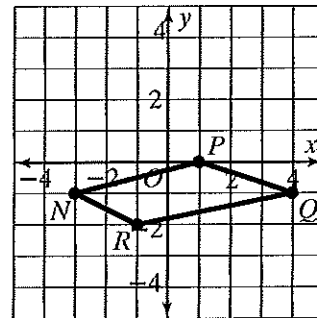
1. $x = 2$



J' _____ K' _____

L' _____ M' _____

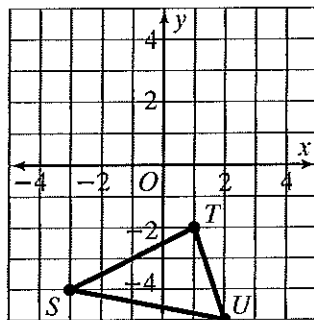
2. $y = 1$



N' _____ P' _____

Q' _____ R' _____

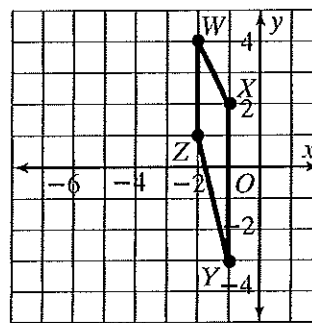
3. $y = -1$



S' _____ T' _____

U' _____

4. $x = -3$



W' _____ X' _____

Y' _____ Z' _____

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