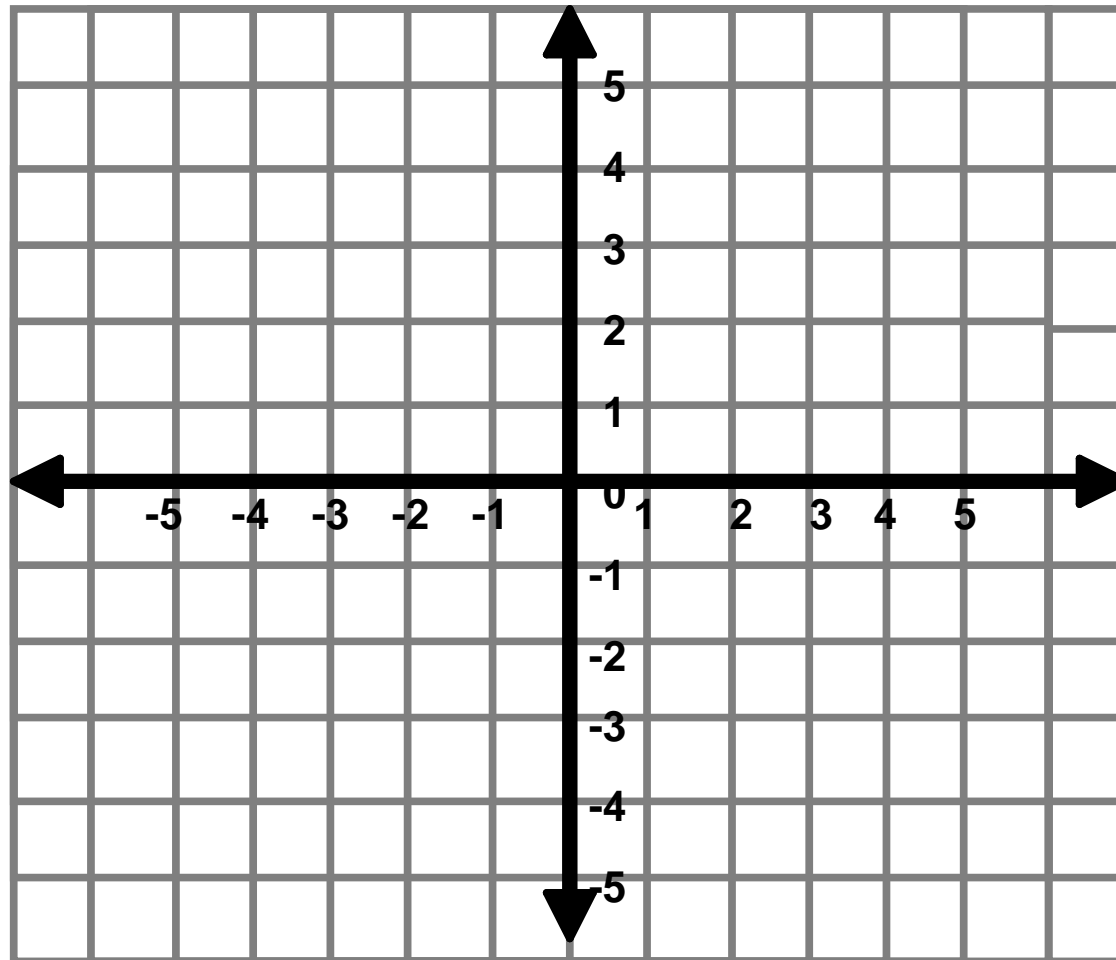


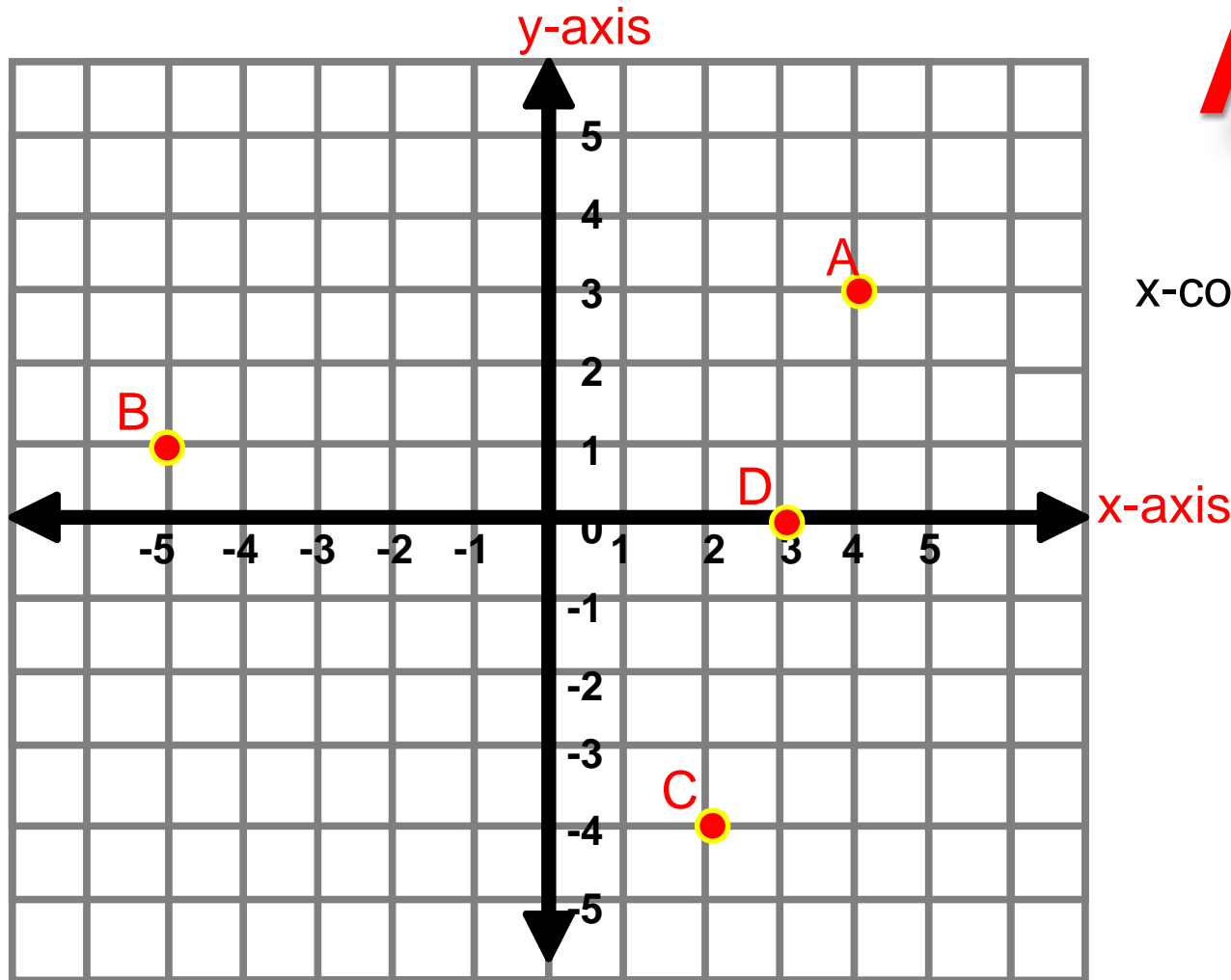
2.1

Translations

COORDINATE PLANE



COORDINATES

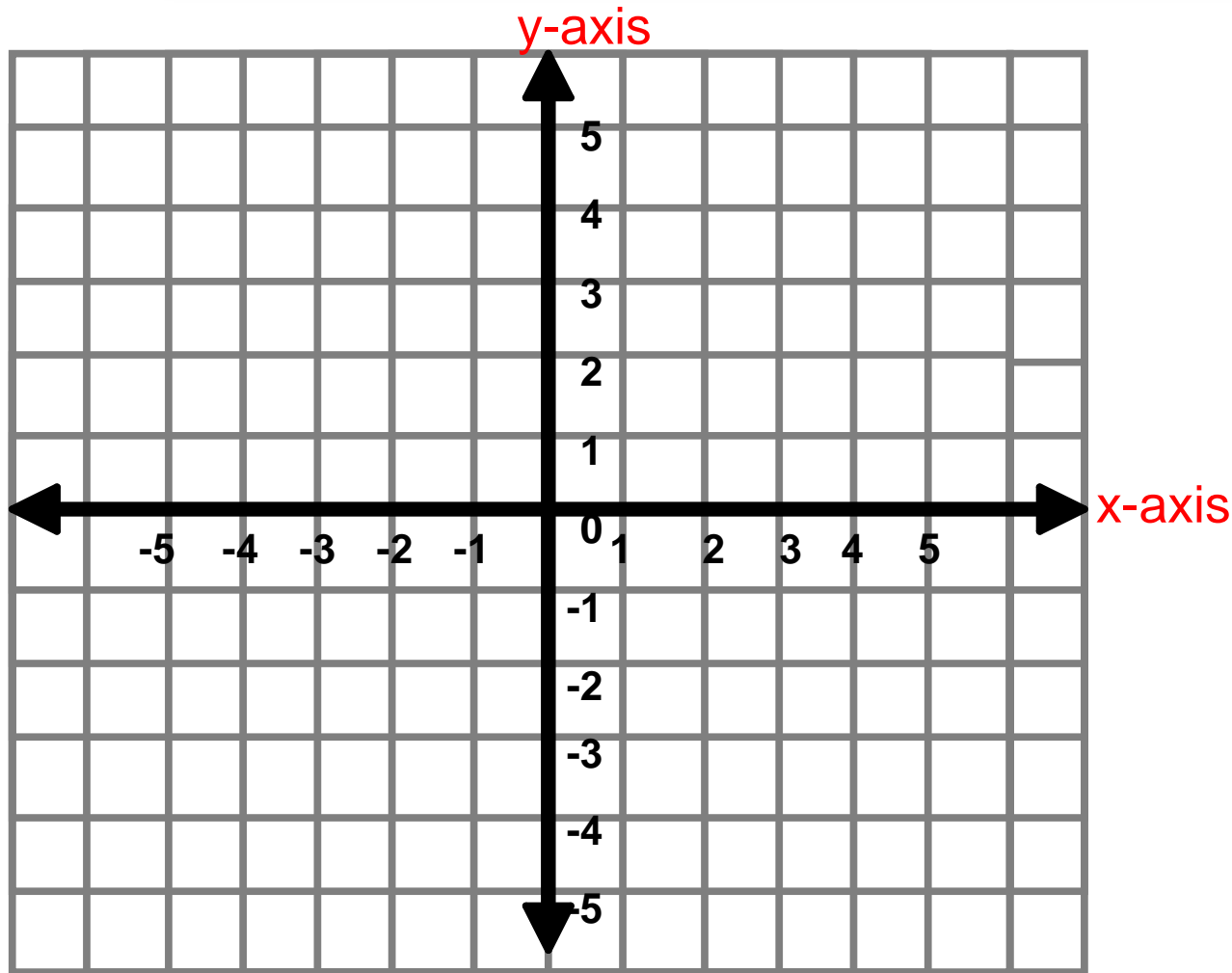


A(4,3)

x-coordinate

y-coordinate

PLOTTING POINTS



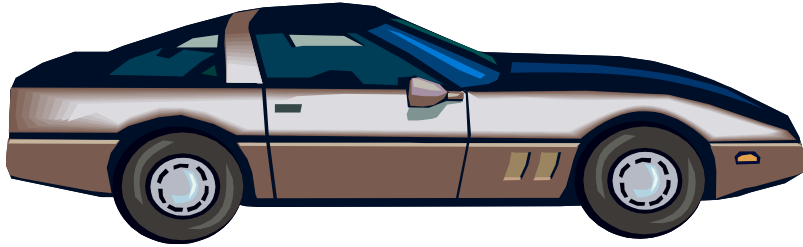
A(5,2)
B(-3,-4)
C(-1,5)
D(3,-5)
E(4,6)
F(0,0)
G(4,0)
H(0,-3)

EXPLORING

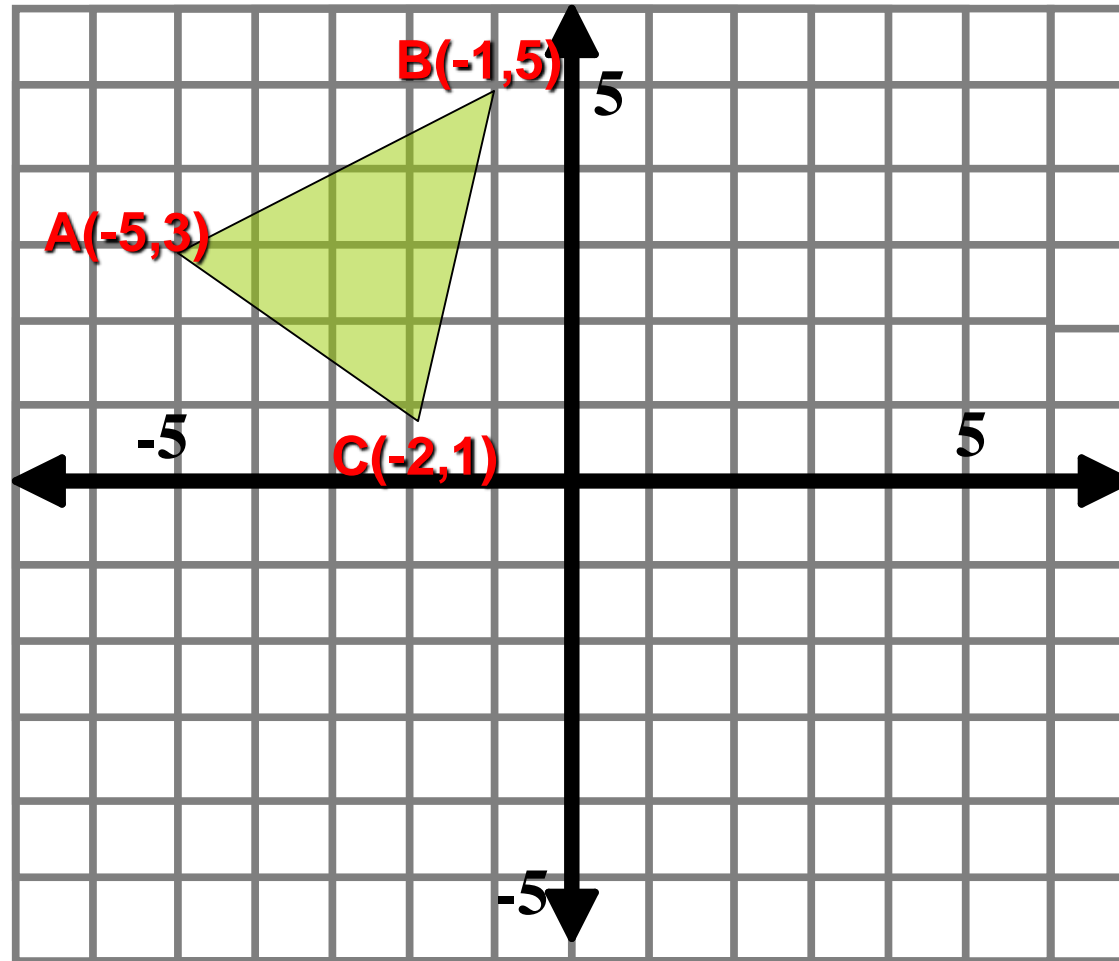
Vocabulary

Translation

Sliding a figure from one place to another



Translations on a Coordinate Plane



Rule:

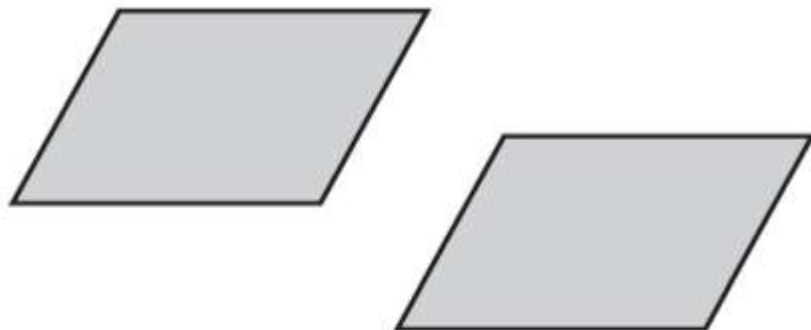
$$(x, y) \rightarrow (x+6, y-5)$$

$$(x, y) \rightarrow (x-8, y-2)$$

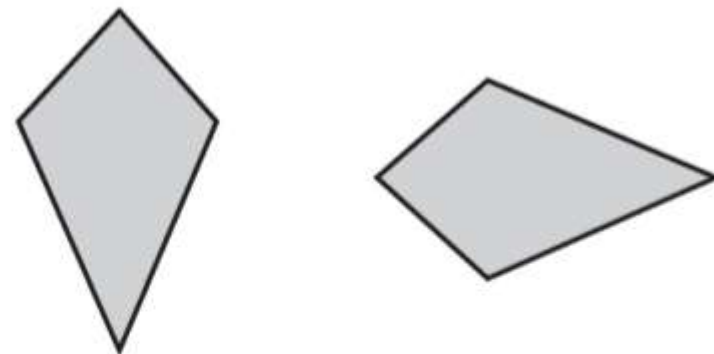
Practice

Tell whether the right figure is a translation of the left figure.

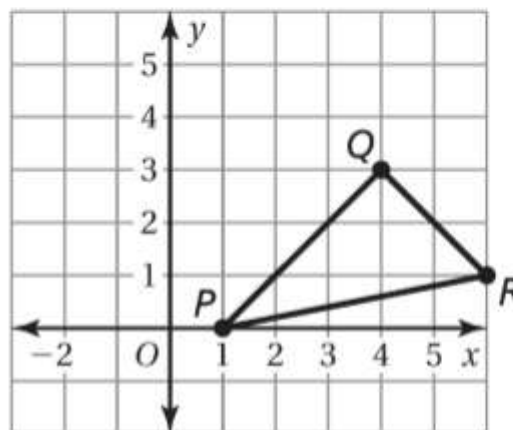
1.



2.



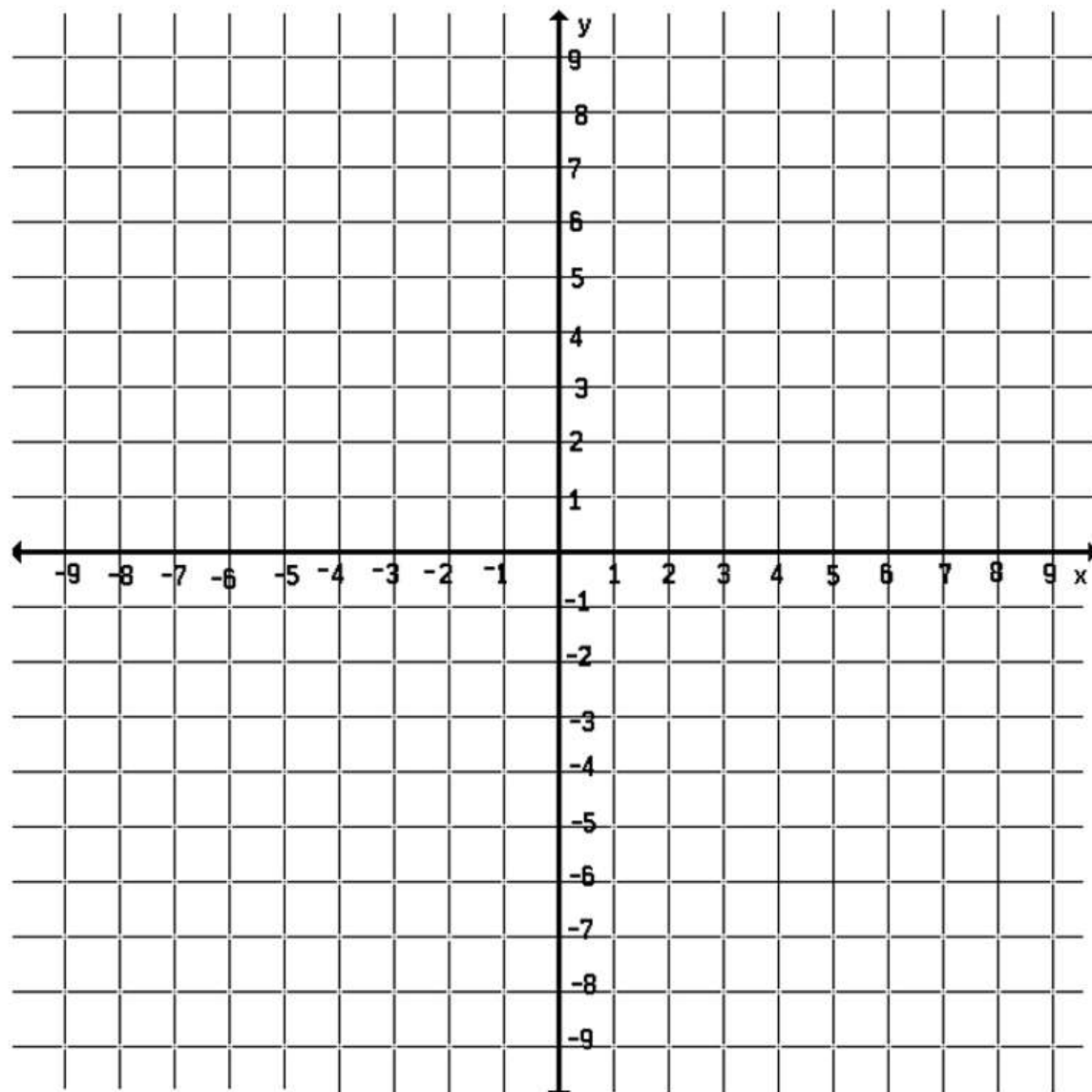
3. Translate the triangle 3 units left and 2 units up. What are the coordinates of the image?



Practice

The vertices of a triangle are $A(-2, 0)$, $B(0, 3)$, and $C(2, 2)$. Draw the figure and its image after the translation.

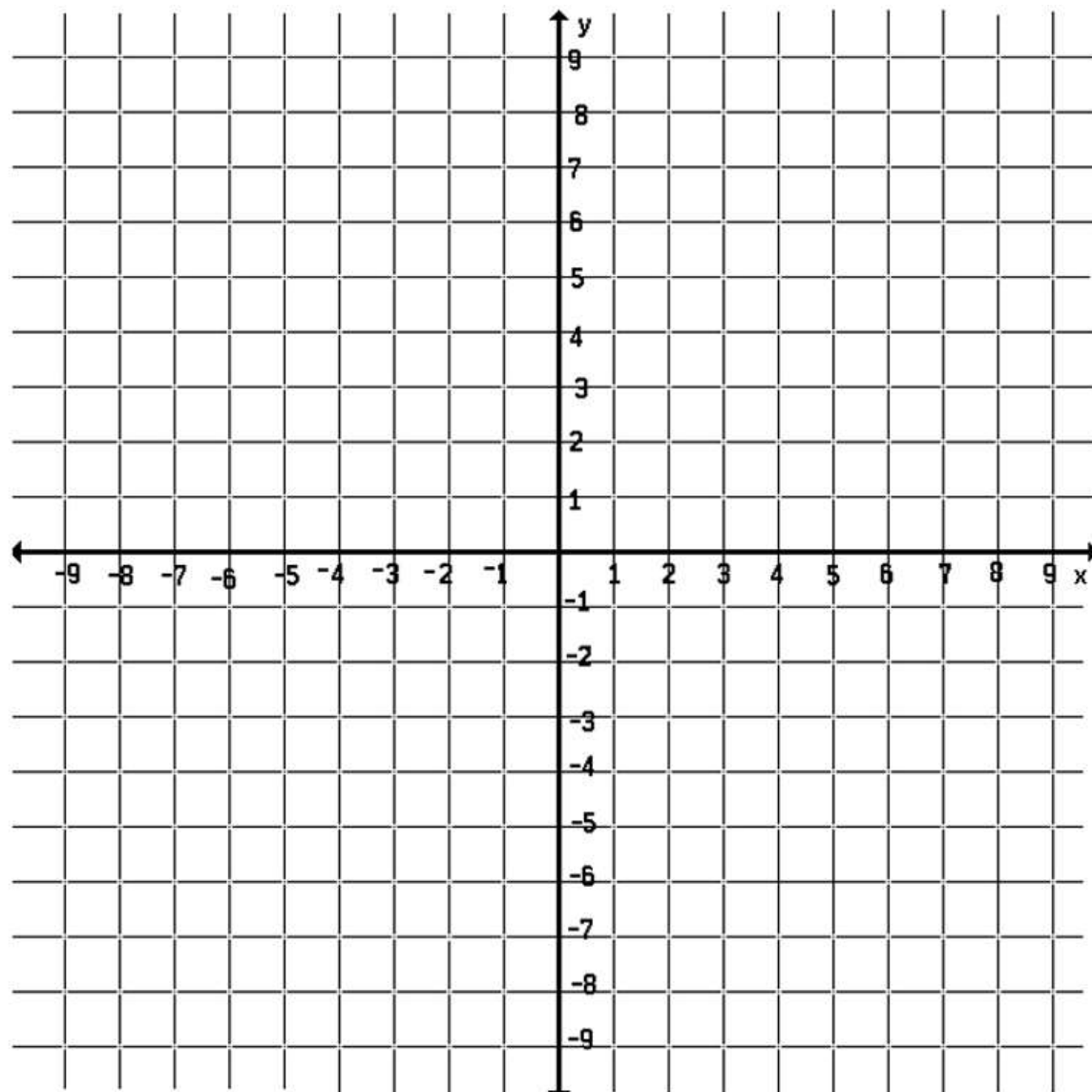
4. 4 units down



Practice

The vertices of a triangle are $A(-2, 0)$, $B(0, 3)$, and $C(2, 2)$. Draw the figure and its image after the translation.

5. 2 units right and 1 unit up



Practice

6. Describe the translation from the solid line figure to the dashed line figure.

