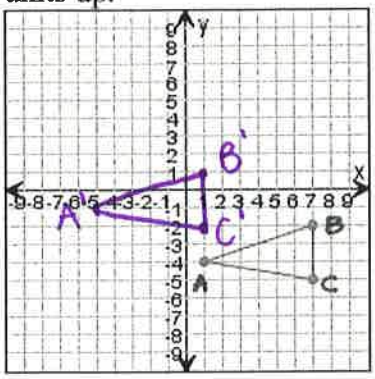
UNIT 2 HOMEWORK: TRANSFORMATION (TRANSLATIONS)

List the coordinates of the pre-image and then the coordinates of the image after performing each indicated translation. Graph and label the image.

1. Translate the triangle left 6 units, then 3 units up.



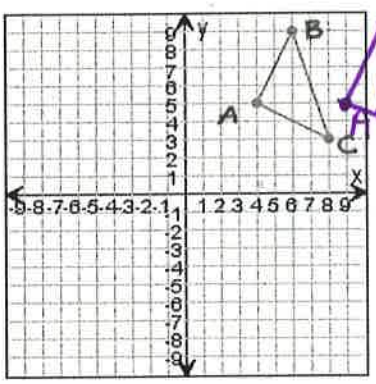
$(x-6, y+3)$

$A(1,-4) \rightarrow A'(-5,-1)$

$B(7,-2) \rightarrow B'(1,1)$

$C(7,-5) \rightarrow C'(1,-2)$

2. Translate the triangle 5 units right.



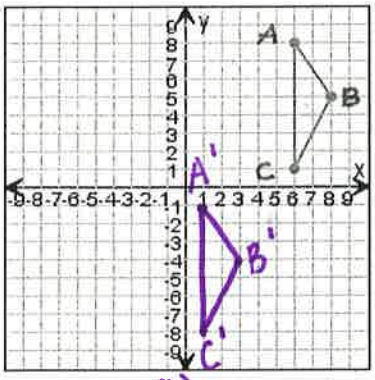
$(x+5, y)$

$A(4,5) \rightarrow A'(9,5)$

$B(6,9) \rightarrow B'(11,9)$

$C(8,3) \rightarrow C'(13,3)$

3. Translate the triangle left 5 units, then 9 units down.



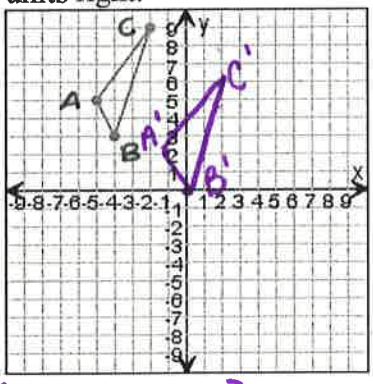
$(x-5, y-9)$

$A(6,8) \rightarrow A'(1,-1)$

$B(8,5) \rightarrow B'(3,-4)$

$C(6,1) \rightarrow C'(1,-8)$

4. Translate the triangle down 3 units, then 4 units right.



$(x+4, y-3)$

$A(-5,5) \rightarrow A'(-1,2)$

$B(-4,3) \rightarrow B'(0,0)$

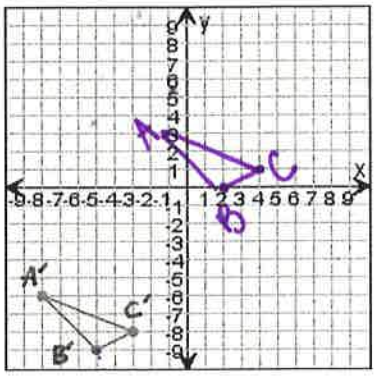
$C(-2,9) \rightarrow C'(2,6)$

UNIT 2 HOMEWORK: TRANSFORMATION (TRANSLATIONS)

List the coordinates of the image and the coordinates of the pre-image before each transformation was performed. Draw the pre-image.

use the rule to work backwards

5. Translate the triangle left 7 units, then 9 units down.



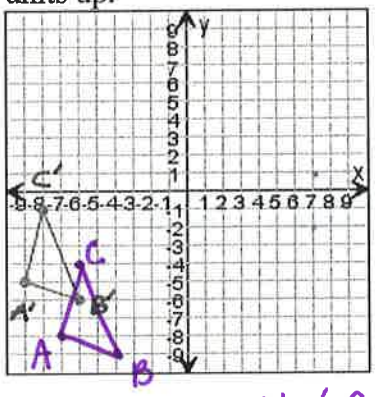
$(x-7, y-9)$

$A(-1, 3) \rightarrow A'(-8, -6)$

$B(2, 0) \rightarrow B'(-5, -9)$

$C(4, 1) \rightarrow C'(-3, -8)$

6. Translate the triangle left 2 units, then 3 units up.



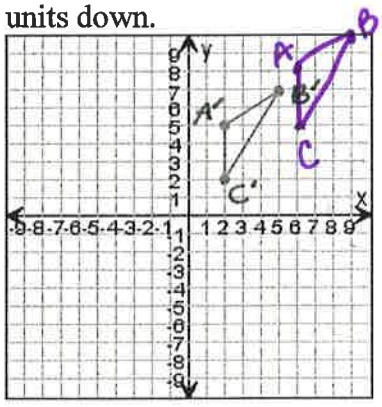
$(x-2, y+3)$

$A(-7, -8) \rightarrow A'(-9, -5)$

$B(-4, -9) \rightarrow B'(-6, -6)$

$C(-6, -4) \rightarrow C'(-8, -1)$

7. Translate the triangle left 4 units, then 3 units down.



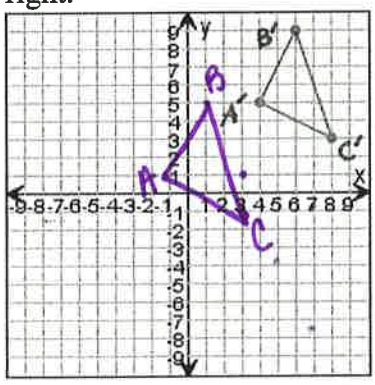
$(x-4, y-3)$

$A(6, 8) \rightarrow A'(2, 5)$

$B(9, 10) \rightarrow B'(5, 7)$

$C(6, 5) \rightarrow C'(2, 2)$

8. Translate the triangle 4 units up and 5 right.



$(x+5, y+4)$

$A(-1, 1) \rightarrow A'(4, 5)$

$B(1, 5) \rightarrow B'(6, 9)$

$C(3, -1) \rightarrow C'(8, 3)$