

Bellwork

02/21/2012

Multiply the matrices.

1. $[1 \quad -2 \quad 3] \begin{bmatrix} 0 & -1 \\ -4 & 2 \\ -3 & 1 \end{bmatrix} \quad (1 \times 2)$

$$1(0) + -2(-4) + 3(-3)$$
$$0 + 8 + -9$$

$$1(-1) + -2(2) + 3(1)$$
$$-1 + -4 + 3$$

$$[-1 \quad -2]$$

Lesson 9.1

Use the translation $(x, y) \rightarrow (x + 6, y - 3)$.

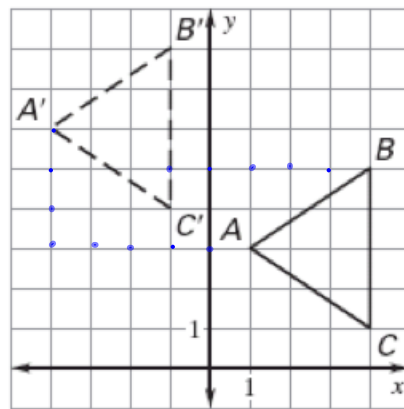
1. What is the image of $B(-4, 1)$?

$$B'(-4+6, 1-3) \quad B'(2, -2)$$

2. What is the preimage of $C'(2, -7)$? $(x-6, y+3)$

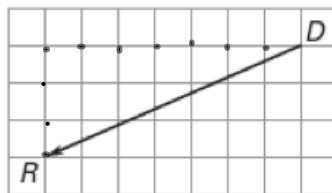
$$C(2-6, -7+3) \quad C(-4, -4)$$

$A'B'C'$ is the image of ABC after a translation. Write a rule for the translation. Then verify that the translation is an isometry.



$$(x, y) \rightarrow (x-6, y+3)$$

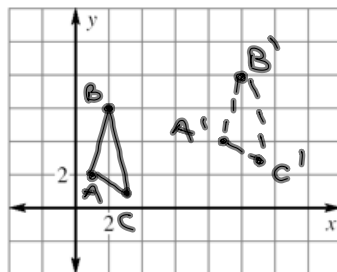
Name the vector and write its component form.



$$\vec{DR} \quad \langle -7, -3 \rangle$$

The vertices of ABC are $A(1, 2)$, $B(2, 6)$, and $C(3, 1)$. Translate ABC using the given vector. Graph ABC and its image.

$$\langle 8, 2 \rangle$$



Lesson 9.2

$$6. \begin{bmatrix} -1 & -9 \\ 0 & 2 \end{bmatrix} + \begin{bmatrix} -5 & -9 \\ +6 & +7 \end{bmatrix}$$

$$\begin{bmatrix} -6 & -18 \\ 6 & 9 \end{bmatrix}$$

$$7. \begin{bmatrix} 5 & -2 \\ 2 & 4 \\ -7 & 2 \end{bmatrix} + \begin{bmatrix} 1 & 3 \\ 6 & -4 \\ 6 & -1 \end{bmatrix}$$

$$\begin{bmatrix} 6 & 1 \\ 8 & 0 \\ -1 & 1 \end{bmatrix}$$

$$13. \begin{bmatrix} -3 & 2 & 6 \end{bmatrix} \begin{bmatrix} -5 \\ 0 \\ -3 \end{bmatrix} \quad 1 \times 1$$

$$14. \begin{bmatrix} 2 & 5 & 5 \\ 1 & 0 & 3 \end{bmatrix} \begin{bmatrix} 0 \\ -4 \\ 2 \end{bmatrix}$$

$$\begin{matrix} 0 & + & -20 & + & 10 \\ 2(0) & + & 5(-4) & + & 5(2) \end{matrix}$$

$$\begin{matrix} 0 & + & 0 & + & 6 \\ 1(0) & + & 0(-4) & + & 3(2) \end{matrix}$$

$$\begin{bmatrix} -10 \\ 6 \end{bmatrix}$$

Homework Assignment

Pg. 912 #1-11

Pg. 585 #18-23

Quest 9.1-9.2 Tomorrow!