8.1 Translations Day 2

TSW understand concept of translations
*drawing images after translation
***find coordinates of points after translation**

Find the Coordinates of Points After Translations.

Example 4 **Find the coordinates of points after translations.**

A triangular block of concrete ABC at a construction site is to be relocated using the translation: 5 units to the right and 3 units down. The coordinates of A, B, and C are given in the table. Find the coordinates of the relocated block $A'B'C'$. Then state the new coordinates for any point (x, y) under this translation.

Original Point	Is Mapped Onto
A (1, 1)	A' (?, ?)
B (3, 1)	B' (?, ?)
C (2, 5)	C' (?, ?)
(x, y)	(?, ?)

To find the coordinates of the block after the translation, add 5 units to the x-coordinate and subtract 3 units from the y-coordinate for each point.

Guided Practice

Complete.

4 A triangle has coordinates A (2, 1), B (3, 2), and C (1, 4). It is moved under the translation 2 units to the left and 3 units up. Find the coordinates of the image triangle $A'B'C'$. Then state the new coordinates for any point (x, y) under this translation.

Original Point	Is Mapped Onto
A (2, 1)	A' (__?__, __?__)
B (3, 2)	B' (__?__, __?__)
C (1, 4)	C' (__?__, __?__)
(x, y)	(__?__, __?__)

To find the coordinates of A', B', and C', subtract 2 units from the x-coordinate and add 3 units to the y-coordinate of A, B, and C.