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Translation of Figures

Name _____ Score _____

Math Blast

Respond to the questions and show all steps.

A point P is located at (3, -2) on a coordinate plane. If it is translated 5 units to the left and 4 units up, what are the coordinates of its image, P'?	Show all steps here
A triangle ABC has vertices at A(1, 1), B(4, 1), and C(1, 5). If the triangle is translated according to the rule $(x,y)\rightarrow(x-2,y+3)$, what are the coordinates of the vertices of its image, A'B'C'?	Show all steps here
Point Q was originally at (6, 0). After a translation, its image Q' is located at (2, -3). Write the translation rule in the form $(x,y)\rightarrow(x+a,y+b)$.	Show all steps here
A rectangle DEFG has vertices D(-1, -1), E(3, -1), F(3, 2), and G(-1, 2). If the rectangle is translated so that its new vertex D' is at (4, 1), describe the translation in words.	Show all steps here
Point M is at (-5, 8). It undergoes a translation described by the rule $(x,y)\rightarrow(x+7,y-10)$. What are the coordinates of the translated point M'? In words, describe the direction and number of units for each part of this translation.	Show all steps here

Translation of Figures

Answer Key

Respond to the questions and show all steps.

P'(-2, 2)

The coordinates of the image are A'(-1, 4), B'(2, 4), and C'(-1, 8).

The translation rule is $(x,y) \rightarrow (x-4, y-3)$.

The rectangle is translated 5 units right and 2 units up.

M'(2, -2); The translation is 7 units right and 10 units down.