Transformations within a Plane - Step-by-Step Lesson
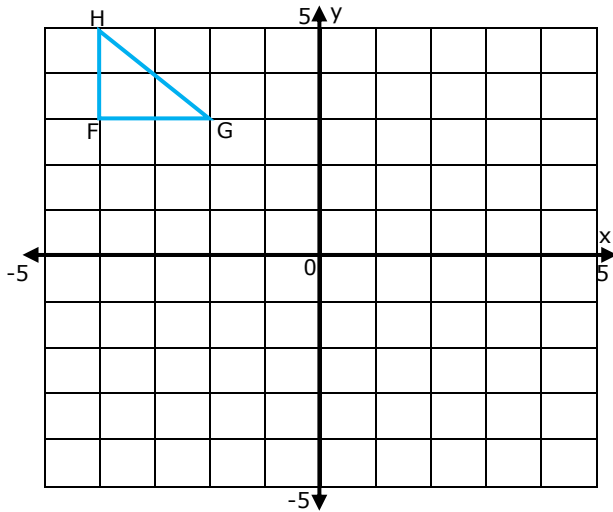
1. Write the coordinates of the vertices after a translation of 6 units to the right and 2 units down.

Explanation:

A translation slides a figure to a different location.

Move point F(-4, 3) right 6 units and down 2 units. F' has coordinates (2, 1).

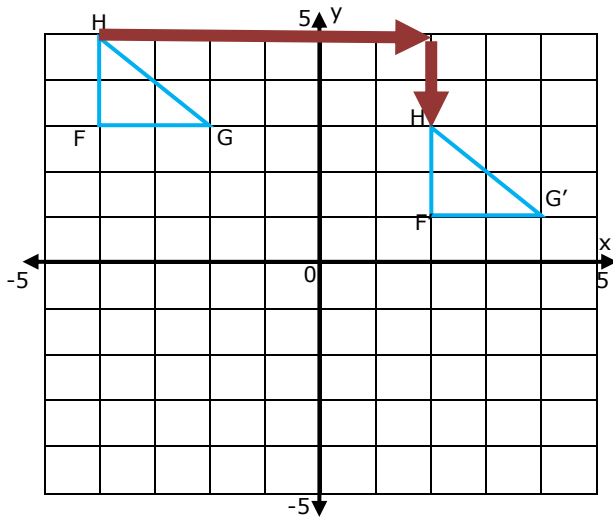Now move point H(-4, 5) right 6 units and down 2 units. H' has coordinates (2, 3).

Now move point G(-2, 3) right 6 units and down 2 units. G' has coordinates (4, 1).

The translated points form a triangle congruent to ΔHFG.

Since you moved each vertex right 6 units and down 2 units, you can find the new vertices by subtracting 6 from each x-coordinate and subtracting 2 from each y-coordinate.

Write the coordinates of the vertices using arrow notation:

F(-4, 3) ⟶ F' (2, 1)

H(-4, 5) ⟶ H'(2, 3)

G(-2, 3) ⟶ G' (4, 1)