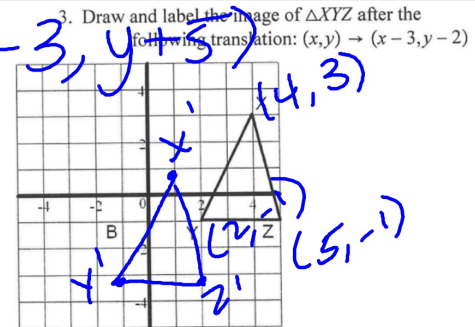
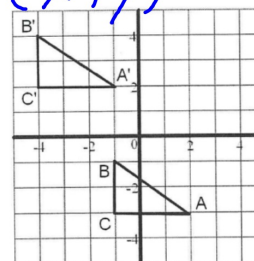


1. Describe what this translation represents in words: $(x, y) \rightarrow (x - 2, y + 3)$

translate
left 2 units
up 3 units

2. Write a rule for the translation shown below.

$(x, y) \rightarrow (x - 3, y + 5)$



4. Find the coordinates of $\triangle EFG$ after the following translation:

$E(1, 2)$ $F(5, 3)$ $G(2, 4)$ $(x, y) \rightarrow (x + 12, y - 27)$

5. Given the coordinates of P and P' below to write a rule for the translation:

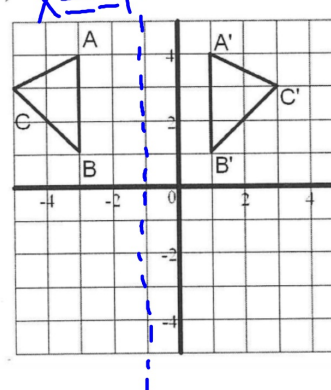
$P(-4, 9)$ $P'(2, 5)$

$(x, y) \rightarrow (x + 6, y - 4)$

$E'(13, -25)$
 $F'(17, -24)$
 $G'(14, -23)$

6. Draw the line of reflection and write its equation for the reflections shown below.

a) $x = -1$



b)

x axis
 $y = 0$

