

# Translations Practice

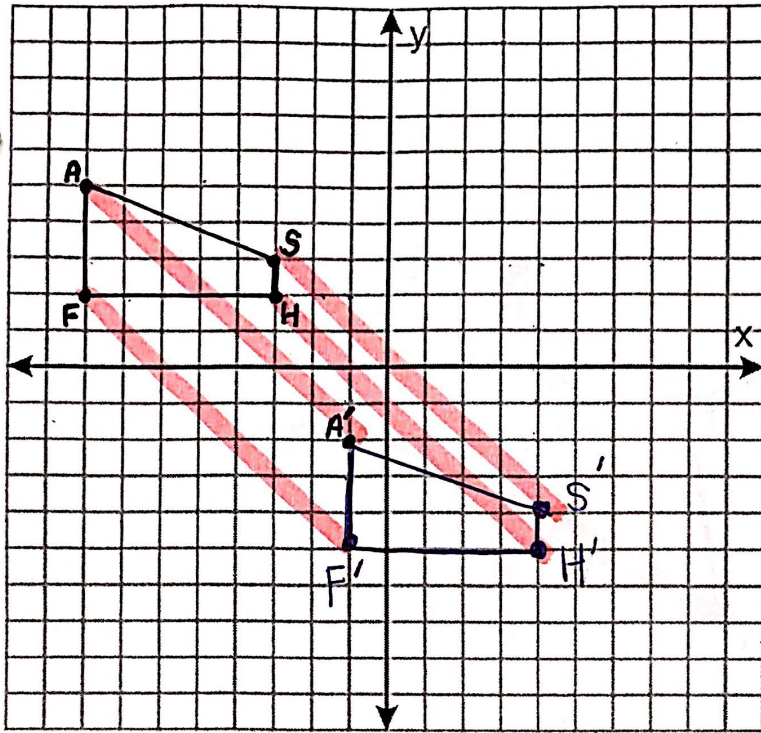


Figure  $AFHS$  is translated. After undergoing the rigid motion transformation,  $A(-8, 5)$  maps to  $A'(-1, -2)$ .

- Describe the transformation in words.

Translate Right 7 and down 7

- Write the function rule for the translation.

$$f(x, y) = (x + 7, y - 7)$$

- Identify the image points  $F', H', S'$ .

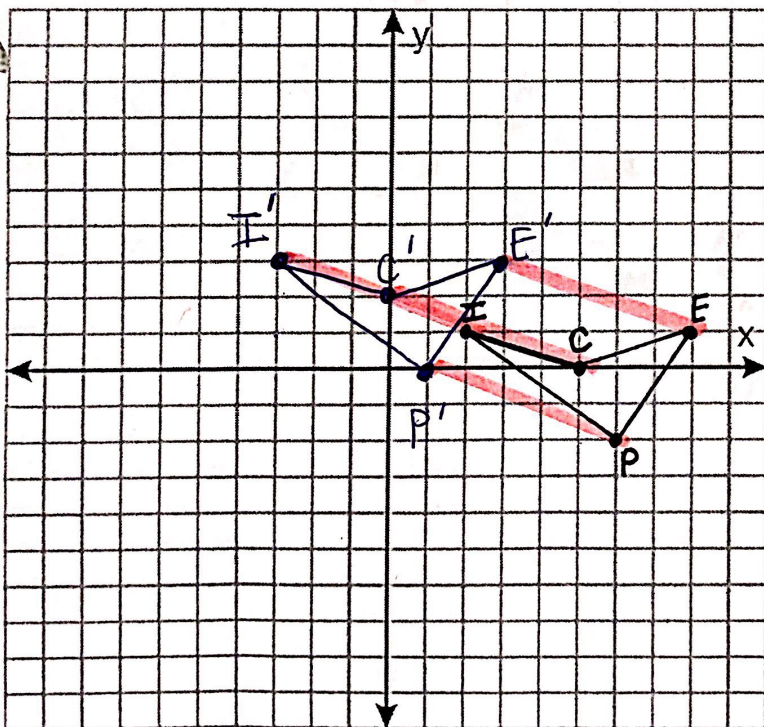


Figure  $EPIC$  is translated using the function rule

$$f(x, y) = (x - 5, y + 2)$$

- Describe the transformation in words.

Translate left 5 and up 2

- Identify the mapping for each vertex.

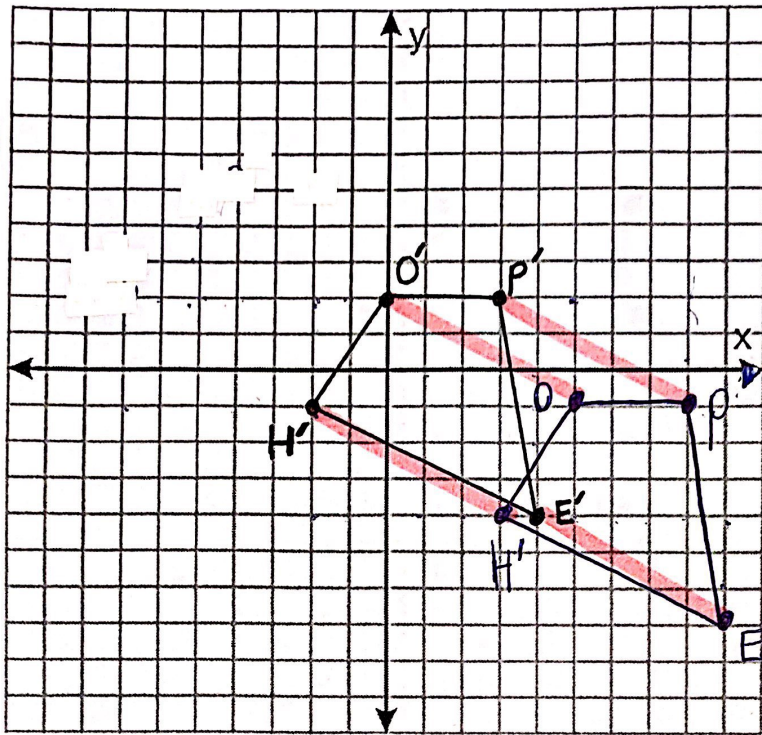


Figure HOPE is translated up 3 units and left 5 units.

- Write the function rule for the translation.

$$f(x, y) = (x + 5, y - 3)$$

- Identify the domain and range.

$$D: \{ \}$$

$$R: \{(-2, -1), (0, 2), (3, 2), (4, -4)\}$$

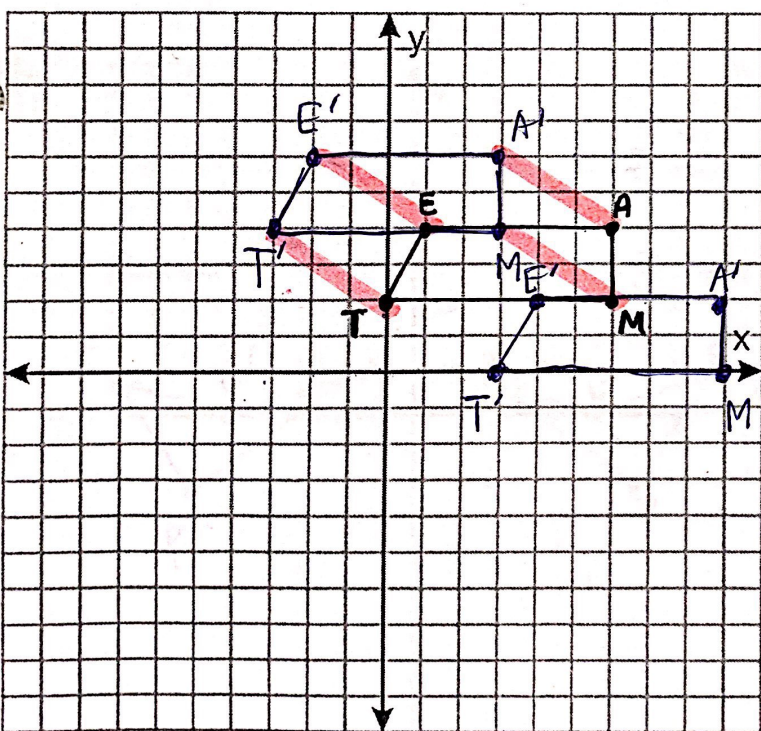


Figure TEAM is translated to create figure T'E'A'M'. The slope of  $\overline{TT'}$  is  $-\frac{2}{3}$ .

- Identify possible coordinates of figure T'E'A'M'

$$\overline{TT'}(3, 0), E(4, 2), A(9, 2), M(9, 0)$$

$$\text{OR } T'(-3, 4), E'(-2, 6), A'(3, 6), M'(3, 4)$$

- Describe the translation in words.

Translated down 2, Right 3.

- Write the function rule for the transformation.

$$f(x, y) = (x + 3, y - 2)$$