Ch 2 Practice Test

KEY

Write the coordinates of A(2, 0) B(4, -4) C(1, -4) from the triangles in #1-2 below.

1. Translate using the rule (x,y) ⟶ (x – 4, y + 5) and label the image.

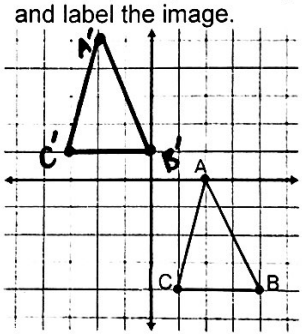
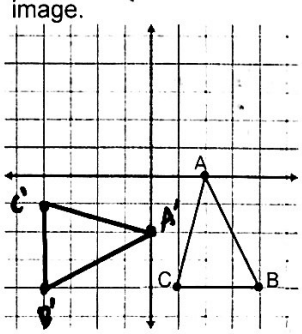


Image Coordinates:
A' (-2, 5) B' (0, 1) C' (-3, 1)

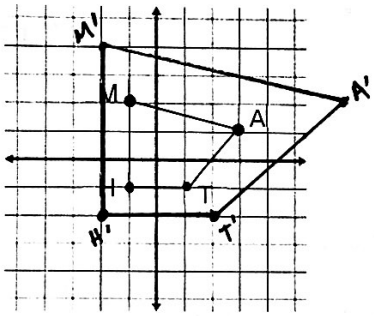
2. Rotate 90° clockwise and label the image.



(y, -x)

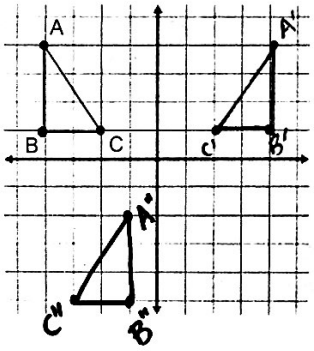
Image Coordinates:
A' (0, -2) B' (-4, -4) C' (-4, -1)

3. Dilate quadrilateral MATH using k = 2. Write original and image coordinates and LABEL.



M (-1, 2), A (3, 1), T (1, -1), H (-1, -1)
M' (-2, 4), A' (6, 2), T' (2, -2), H' (-2, -2)

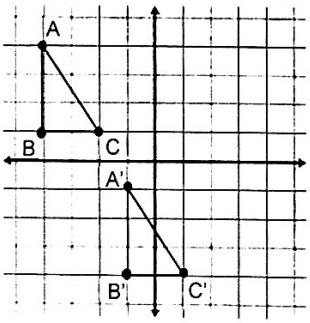
4. Reflect the figure over the *y*-axis, then translate the image using (x, y) ⟶ (x – 5, y – 6).



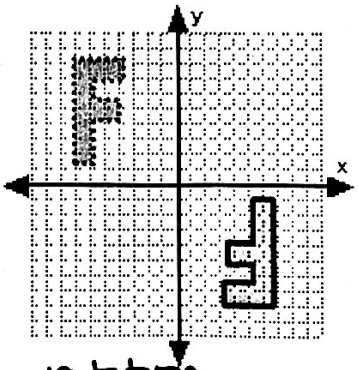
2nd Image Coordinates:

A" (-1, -2) B" (-1, -5) C" (-3, -5)

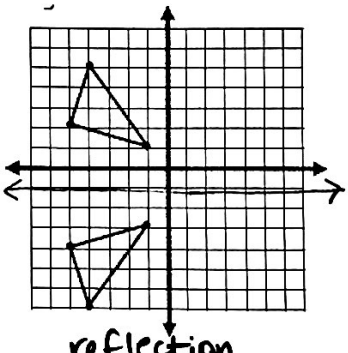
5. Name the transformation **and** write the rule.



translation
(x,y) → (x+3, y-5)

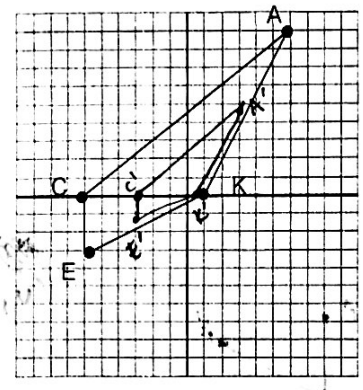


rotation
180°



reflection
over y=-1

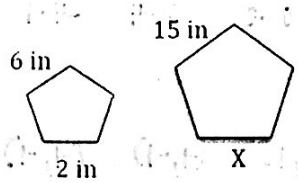
6. Dilate quadrilateral CAKE using k = ½ . Write original and image coordinates.



C (-6,0), A (6,9), K (1,0), E (-6,-3)

C' (-3,0), A' (3,4.5) K' (0.5,0), E' (-3,-1½)

7. The figures are similar. Find the missing side length.



$\frac{6}{15} = \frac{2}{x}$

$6x = 30$

$\boxed{x = 5 \text{ in}}$

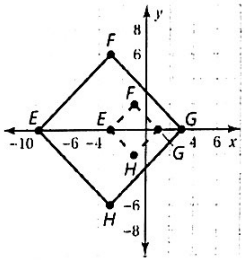
8. The sides of a rectangle are 6in and 16 in. Another rectangle has sides of 3in and 8in. Are they similar? Explain.

$\frac{6}{16} = \frac{3}{8}$

Yes because side lengths are proportional

The dashed figure is a dilation of the solid figure. Identify the type of dilation and find the scale factor.

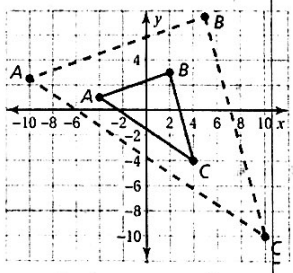
9.



$K = \frac{1}{3}$

reduction

10.



B(2,3)
B'(5,7.5)

k= 2.5
enlargement

11. Circle ALL the ISOMETRIES