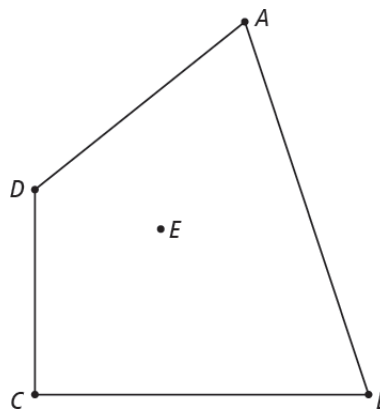




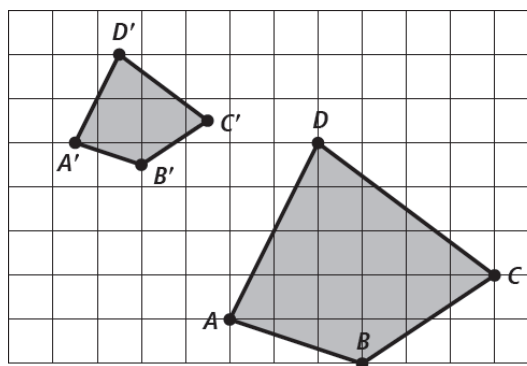
7-1 Additional Practice

Dilations

1. Draw a dilation of $ABCD$ with E as the center and with sides $\frac{1}{2}$ as long.



2. What is the scale factor of the dilation shown?

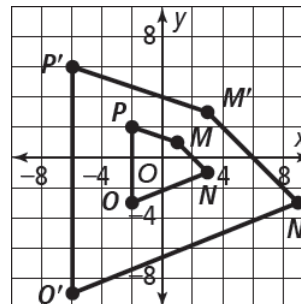


For Exercises 3 and 4, find the coordinates of the vertices of each image.

3. $D_{0.75}(\triangle ABC)$, given $A(4, -3)$, $B(6, 1)$, $C(10, -1)$
4. $D_{1.5}(\triangle XYZ)$, given $X(3, 0)$, $Y(4, 2)$, $Z(6, -2)$
5. $D_k(\triangle ABC)$ has a perimeter of 100 units and an area of 625 units^2 .
 - a. What is the perimeter of $\triangle ABC$?
 - b. What is the area of $\triangle ABC$?

6. Charles enlarged the small kite $MNOP$ to make a design for an art project, as shown.

- a. How are the side lengths of the preimage and image related?
- b. How are the areas related?



- c. What is the scale factor of the dilation Charles used to enlarge the kite?