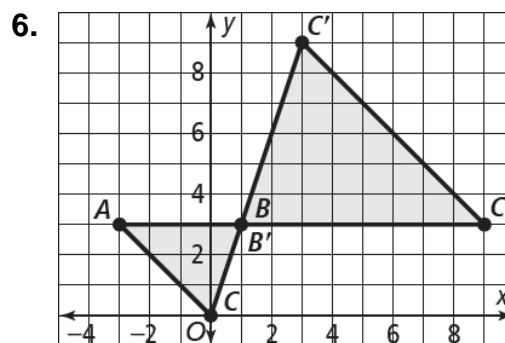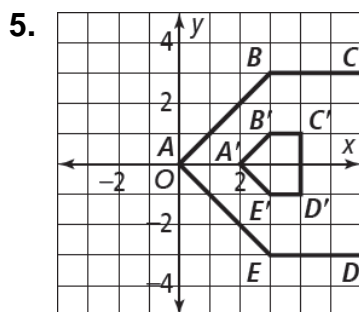# 7-2 Additional Practice
Similarity Transformations

What are the vertices of each image?

1. $(D_{0.75} \circ T_{\langle -3, 2 \rangle})(\triangle ABC)$, given $A(4, -3)$, $B(6, 1)$, $C(10, -1)$

2. $(R_{\text{x-axis}} \circ r_{270°} \circ D_2)(\triangle XYZ)$, given $X(6, 8)$, $Y(3, 4)$, $Z(5, -1)$

3. $(T_{\langle 5, -2 \rangle} \circ R_{\text{y-axis}} \circ D_{0.5})(ABCD)$, given $A(2, 6)$, $B(5, 7)$, $C(8, 5)$, $D(4, 2)$

4. $(T_{\langle -1, 4 \rangle} \circ D_{(2,P)})(\triangle ABC)$, given $A(-2, 1)$, $B(2, 5)$, $C(-2, 4)$, $P(-4, 2)$

Describe the similarity transformations and write the composition of transformations.

5.

6.

7. Luke says that the scale factor relating two figures is 0.6. Paula says the scale factor is $\frac{5}{3}$. If Paula is correct, explain why Luke is incorrect.

8. Carmen has a sign with dimensions 5 ft × 7.5 ft. She wants to reduce it to make a postcard. Postcard sizes are 3.5 in. × 5 in., 4 in. × 6 in., and 4.25 in. × 6 in. Which size postcard should she use? Explain.