Name _____ Date _____

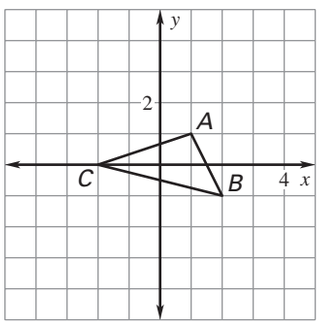
LESSON 6.7

Practice B

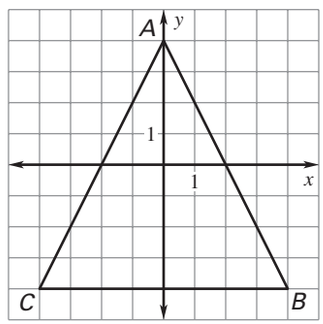
For use with pages 408–415

Draw a dilation of the figure using the given scale factor.

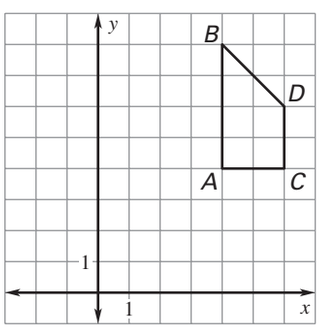
1. $k = 2$



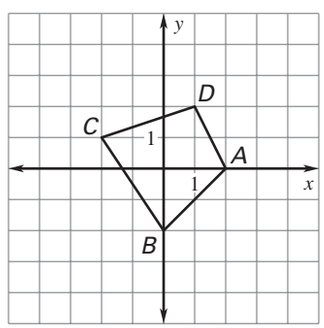
2. $k = \frac{1}{4}$



3. $k = \frac{1}{2}$

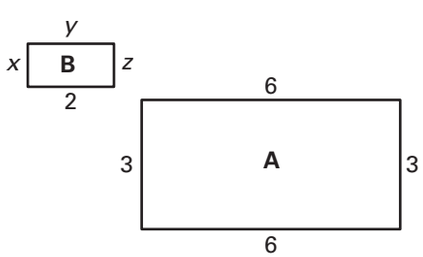


4. $k = 1\frac{1}{2}$

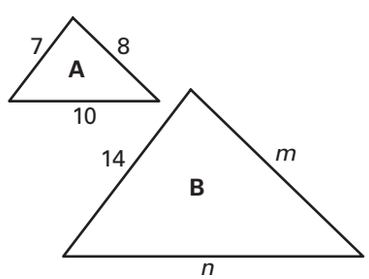


Determine whether the dilation from Figure A to Figure B is a *reduction* or an *enlargement*. Then, find the values of the variables.

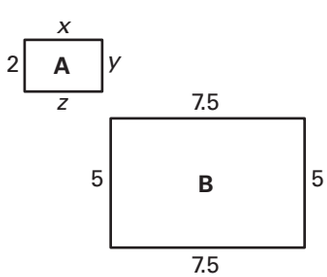
5.



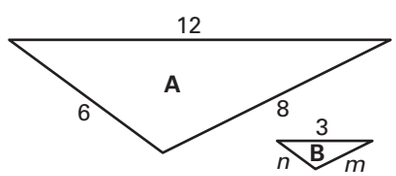
6.



7.



8.



Name _____ Date _____

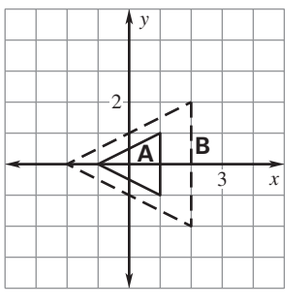
LESSON 6.7

Practice B *continued*

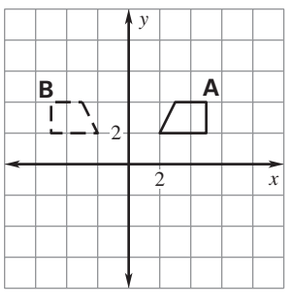
For use with pages 408–415

Determine whether the transformation from Figure A to Figure B is a *translation*, *reflection*, *rotation*, or *dilation*.

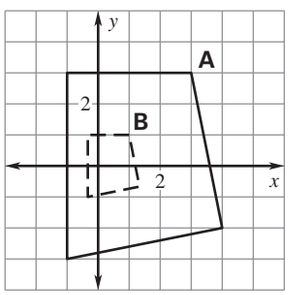
9.



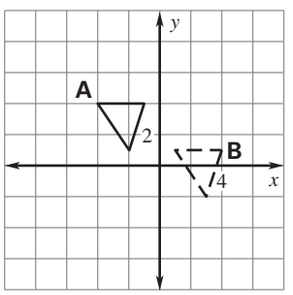
10.



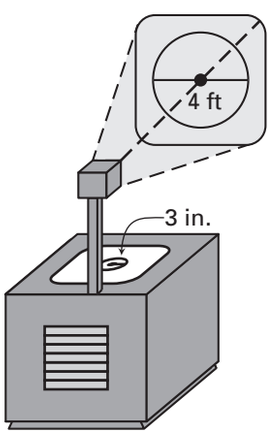
11.



12.



13. Overhead Projectors Your teacher draws a circle on an overhead projector. The projector then displays an enlargement of the circle on the wall. The circle drawn has a radius of 3 inches. The circle on the wall has a diameter of 4 feet. What is the scale factor of the enlargement?



14. Posters A poster is enlarged and then the enlargement is reduced as shown in the figure.

a. What is the scale factor of the enlargement? the reduction?

b. A second poster is reduced directly from size A to size C. What is the scale factor of the reduction?

c. How are the scale factors in part (a) related to the scale factor in part (b)?