

Name _____ # _____
Date _____ Pd. _____

Lesson 6-1-4 Learning Log and Activity

LEARNING LOG:

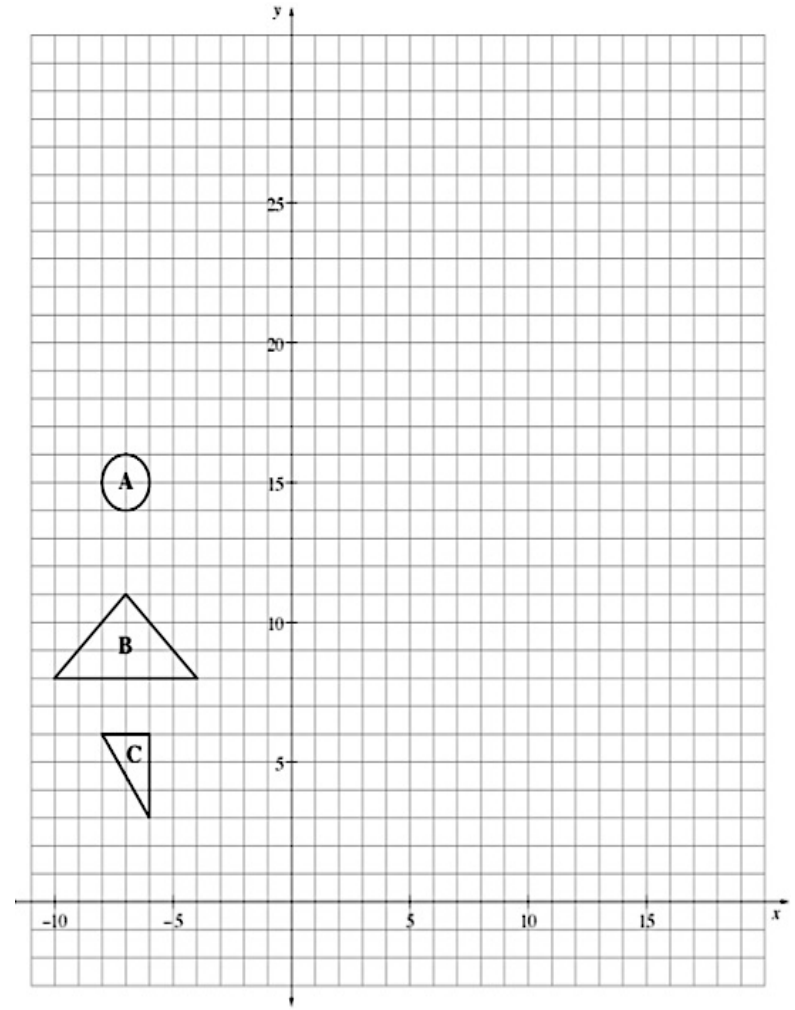
On a separate piece of paper, write what *translate*, *rotate*, and *reflect* mean in your own words. Be sure to use complete sentences and give an example.

ACTIVITY INSTRUCTIONS:

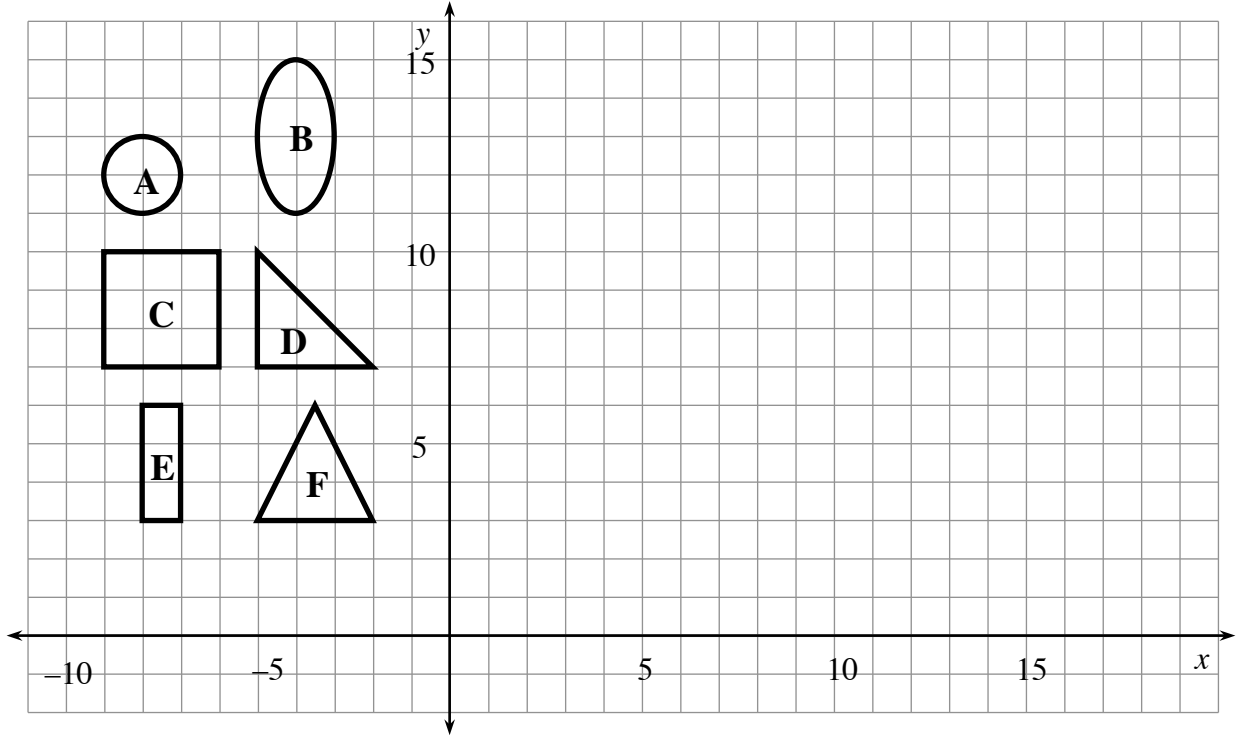
Follow the directions below to create a figure on the grid paper to the right.

1. Draw a rectangle with the vertices $(5,0)$, $(9,0)$, $(9,8)$, and $(5,8)$.
2. Translate circle A, so that the center is at $(7,6)$. Describe how the shape has moved.
3. Rotate triangle C 180 degrees clockwise about point $(-6,3)$. What are the new vertices?
4. Add 15 to each x-coordinate of rotated triangle C and graph the result. SHOW WORK!
5. Reflect triangle B about the y-axis. What are the new vertices?
6. Draw triangle D whose vertices are $(-7,13)$, $(-8,11)$, and $(-6,11)$. Translate triangle D so its top vertex is at $(7,4)$. Describe the translation in a complete sentence.
7. Translate triangle C to the right 11 units. Reflect this triangle about the horizontal line $y=3$.
8. Translate circle A, so that the x-coordinates increase by 13 units and the y-coordinates increase by 11 units.

What is your figure?



Create a Design



Below, provide directions for creating your design. Be sure to include all necessary information.

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