

BECOMING AN ARTIST

Name _____

Use the grid on the back and follow all of the instructions listed below to create a drawing. Be sure to answer all questions on this page.

1. Draw a rectangle with vertices $(5,0)$, $(9,0)$, $(9,8)$, and $(5,8)$.
2. Translate circle A so that its center is at $(7,6)$.
 - How did circle A move from its original location to its new location (in what direction and how many units)?
3. Rotate triangle C 180° clockwise about the point $(-6,3)$.
 - Record the coordinates of the new vertices.
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 - Then add 15 to each x-coordinate and graph the final result. What transformation does "adding 15" represent (Is it a translation, reflection, or rotation)?
4. Reflect triangle B across the y-axis.
 - Record the new coordinates of the vertices.
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 - How are the new coordinates different from the original coordinates of triangle B?
5. A new shape, triangle D, has vertices at $(-7,13)$, $(-8, 11)$, and $(-6,11)$. Draw it. Then translate triangle D so that its top vertex is at $(7,4)$.
 - How did triangle D move from its original location to its new location (in what direction and how many units)?
6. Translate triangle C to the right 11 units. Then reflect the result across the horizontal (\leftrightarrow) line that goes through $y=3$.
 - Record the new coordinates for triangle C.
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7. Translate circle A so that the x-coordinates increase by 13 units and the y-coordinates increase by 11 units.
 - Record the coordinates of the center of circle A in its new position.
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8. Color your picture with at least three or more colors.

