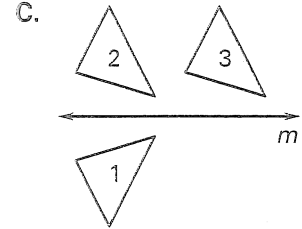
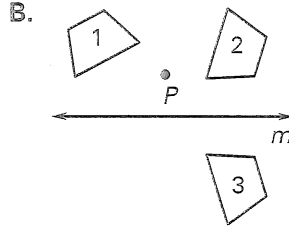
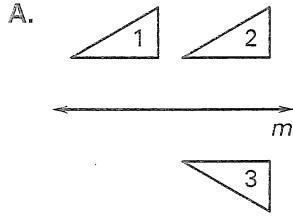


Practice B

For use with pages 430–436

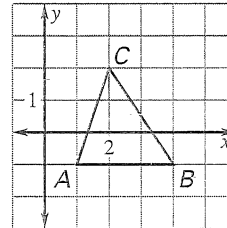
Match the composition with the diagram, in which figure 1 is the preimage of figure 2, and figure 2 is the preimage of figure 3.



1. Reflect in line m , then translate parallel to line m .
2. Translate parallel to line m , then reflect in line m .
3. Rotate about point P , then reflect in line m .

Perform the stated transformation on the preimage, $\triangle ABC$. Give the coordinates of the image, $\triangle A'B'C'$.

4. Rotation: 90° clockwise about the origin
5. Reflection: in $x = 3$
6. Translation: $(x, y) \rightarrow (x + 3, y - 2)$
7. Rotation: 180° counterclockwise about the origin
8. Translation: $(x, y) \rightarrow (x - 3, y - 2)$
9. Reflection: in the line $y = x$



Sketch the image of $A(-4, 2)$ after the described glide reflection.

- | | |
|--|--|
| <ol style="list-style-type: none"> 10. Translation: $(x, y) \rightarrow (x, y + 3)$
Reflection: in the y-axis 12. Translation: $(x, y) \rightarrow (x - 2, y - 5)$
Reflection: in $x = -1$ | <ol style="list-style-type: none"> 11. Translation: $(x, y) \rightarrow (x - 2, y + 5)$
Reflection: in $y = 4$ 13. Translation: $(x, y) \rightarrow (x + 3, y + 2)$
Reflection: in $y = x$ |
|--|--|

Describe the composition of the transformations.

