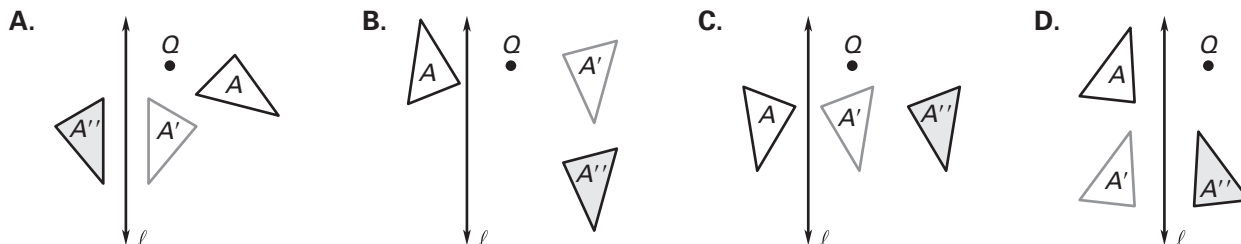


Practice A

For use with pages 430–436

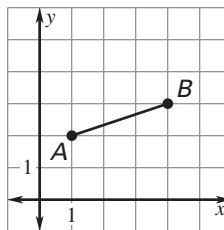
Match the composition with the diagram.



1. Translate parallel to ℓ then reflect in ℓ .
2. Rotate about Q , then translate parallel to ℓ .
3. Rotate about Q , then reflect in ℓ .
4. Reflect in ℓ , then translate perpendicular to ℓ .

Perform the stated transformation on the preimage, $\overline{AB}$. Give the coordinates of the image, $\overline{A'B'}$.

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



Sketch the image of $A(1, -3)$ after the described glide reflection.

11. Translation: $(x, y) \rightarrow (x + 2, y)$
Reflection: in the x -axis
12. Translation: $(x, y) \rightarrow (x - 4, y + 3)$
Reflection: in $y = 2$
13. Translation: $(x, y) \rightarrow (x - 3, y + 2)$
Reflection: in $x = 2$
14. Translation: $(x, y) \rightarrow (x + 5, y - 4)$
Reflection: in $y = -5$

Describe the composition of the transformations.

