Name _____ Class _____ Date _____

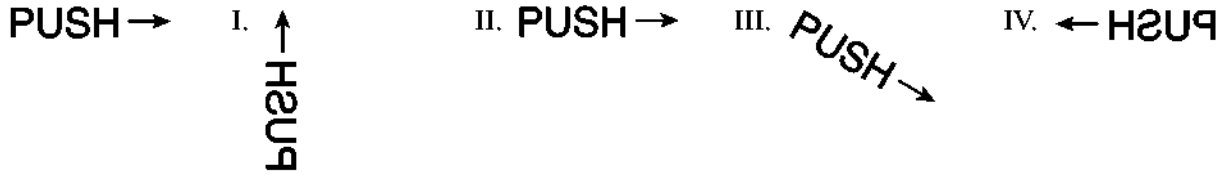
Practice 9-6

Compositions of Reflections

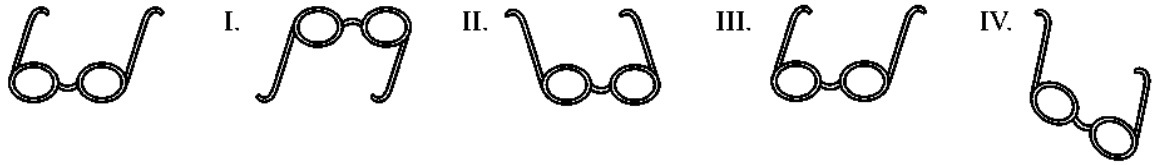
Match each image of the figure at the left with one of the following isometrics:

A. reflection B. rotation C. translation D. glide reflection.

1.

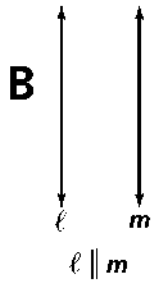


2

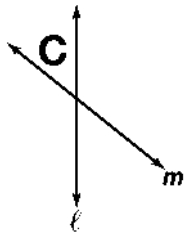


Find the image of each letter through a reflection across line ℓ and then a reflection across line *m*. Describe the resulting translation.

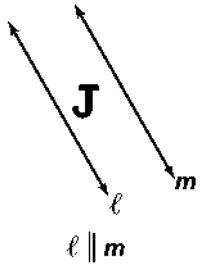
3.



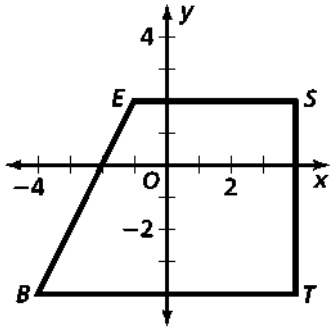
4.



5.



Find the glide reflection image of ▱*BEST* for the given glide and reflection line.



6. $(x, y) \rightarrow (x - 2, y)$ and $x = 0$

7. $(x, y) \rightarrow (x, y - 1)$ and $y = 2$

8. $(x, y) \rightarrow (x, y + 2)$ and $x = 2$

9. $(x, y) \rightarrow (x + 2, y + 2)$ and $y = x$

10. $(x, y) \rightarrow (x - 1, y + 1)$ and $y = 0$

11. $(x, y) \rightarrow (x + 2, y + 2)$ and $y = -x$

12. $(x, y) \rightarrow (x, y + 1)$ and* $= 0$

13. $(x, y) \rightarrow (x + 1, y + 1)$ and $y = 0$

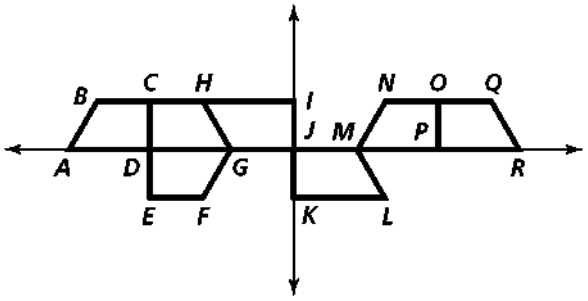
State whether each mapping is a reflection, rotation, translation, or glide reflection.

14. ▱*ABCD* → ▱*GHCD*

15. ▱*HGJI* → ▱*LMJK*

16. ▱*GFED* → ▱*RQOP*

17. ▱*MNOP* → . ▱*ABCD*



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