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## Practice A

For use with pages 421-428

Four playing cards are face down on the floor. Name the transformation.


1. Shape $A$ is mapped to shape $C$.
2. Shape $A$ is mapped to shape $B$.
3. Shape $C$ is mapped to shape $D$.
4. Shape $B$ is mapped to shape $C$.

Match the graph with the description of the translation.
A.

B.

C.

5. $(x, y) \rightarrow(x+2, y-3)$
6. $(x, y) \rightarrow(x+3, y-2)$
7. $(x, y) \rightarrow(x-2, y+3)$

Consider the translation that is defined by the coordinate notation
$(\boldsymbol{x}, \boldsymbol{y}) \rightarrow(\boldsymbol{x}+\mathbf{4}, \boldsymbol{y}-\mathbf{6})$.
8. What is the image of $(1,1)$ ?
9. What is the image of $(-3,4)$ ?
10. What is the image of $(5,2)$ ?
11. What is the preimage of $(0,4)$ ?
12. What is the image of $(3,0)$ ?
13. What is the preimage of $(2,-4)$ ?

Copy figure $A B C D$ and draw its image after the translation.
14. $(x, y) \rightarrow(x+1, y+4)$
15. $(x, y) \rightarrow(x-2, y-2)$
16. $(x, y) \rightarrow(x-5, y+6)$
17. $(x, y) \rightarrow(x+3, y-5)$


