

LESSON
9.5

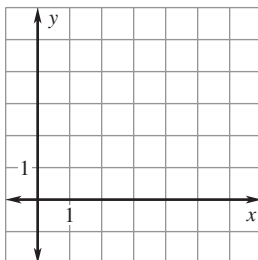
Practice A

For use with pages 607–615

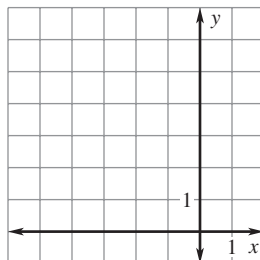
If you turn this in on time: do the odds.
If you turn this in late or
you are doing it over: do the evens.

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

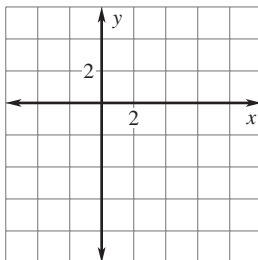
- 1. Translation:** $(x, y) \rightarrow (x + 2, y)$
Reflection: in the x -axis



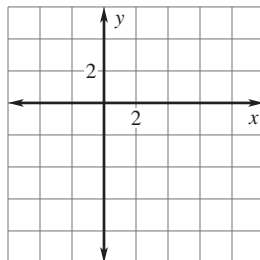
- 2. Translation:** $(x, y) \rightarrow (x - 4, y + 3)$
Reflection: in $y = 2$



- 3. Translation:** $(x, y) \rightarrow (x - 3, y + 2)$
Reflection: in $x = 2$

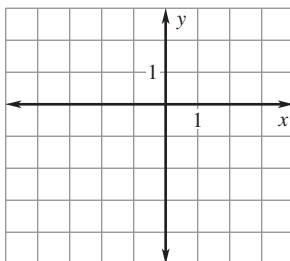


- 4. Translation:** $(x, y) \rightarrow (x + 5, y - 4)$
Reflection: in $y = -5$

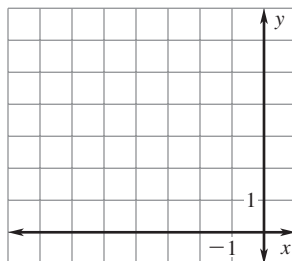


The vertices of $\triangle ABC$ are $A(2, 4)$, $B(7, 6)$, and $C(5, 2)$. Graph the image of $\triangle ABC$ after a composition of the transformations in the order they are listed.

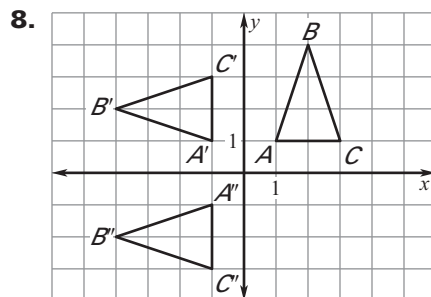
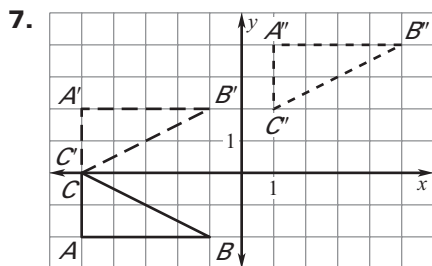
- 5. Translation:** $(x, y) \rightarrow (x - 4, y - 3)$
Reflection: in the x -axis



- 6. Translation:** $(x, y) \rightarrow (x - 2, y)$
Rotation: 90° about the origin



Describe the composition of transformations.



Student
score:
How well
do you feel
you understand
this learning
target:

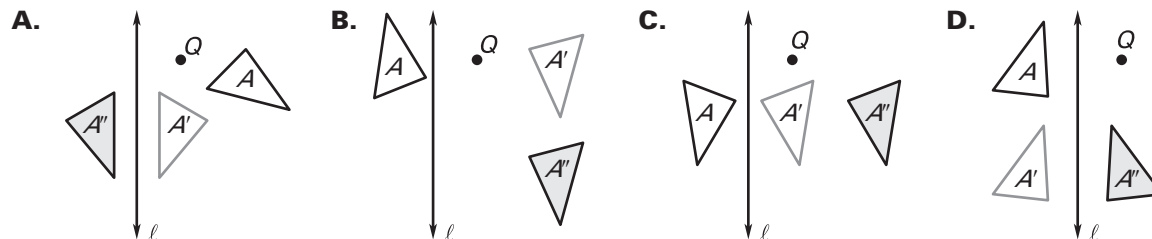
A
B
C
D
F

LESSON 9.5

Teacher
Score:

LESSON 9.5 **Practice A** *continued*
For use with pages 607–615

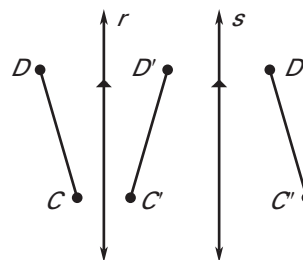
Match the composition with the diagram.



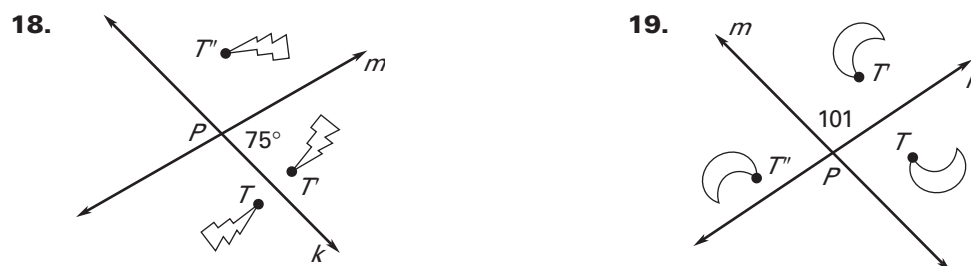
9. Translate parallel to l then reflect in l . 10. Rotate about Q , then translate parallel to l .
11. Rotate about Q , then reflect in l . 12. Reflect in l , then translate perpendicular to l .

In the diagram, $r \parallel s$, \overline{CD} is reflected in line r , and $\overline{C'D'}$ is reflected in line s .

13. A translation maps \overline{CD} onto which segment?
14. Which lines are perpendicular to $\overleftrightarrow{DD''}$?
15. Name two segments parallel to $\overline{CC''}$.
16. If the distance between r and s is 2 inches, what is the length of $\overline{CC''}$?
17. Is the distance from C' to s the same as the distance from C'' to s ? *Explain.*



Find the angle of rotation that maps T onto T' .



20. Describe the transformations used to create the puzzle pattern.

