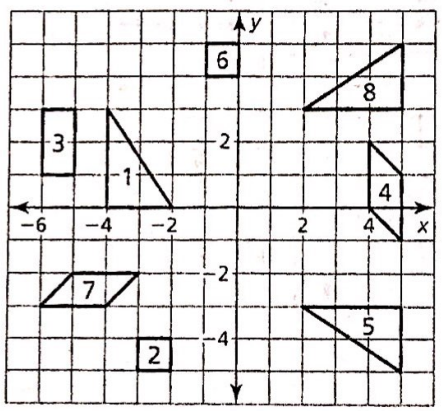
Name _____ Date _____

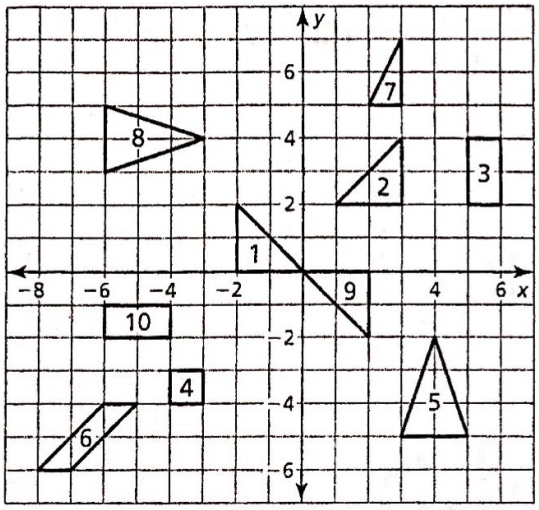
4.4 Practice A

In Exercises 1 and 2, identify any congruent figures in the coordinate plane. Explain.

1.

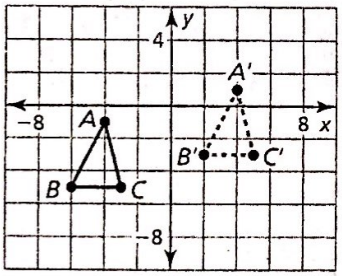


2.

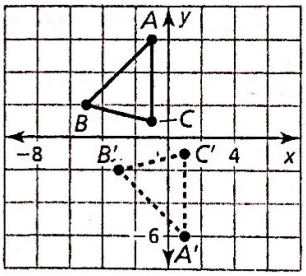


In Exercises 3 and 4, describe a congruence transformation that maps $\triangle ABC$ to $\triangle A'B'C'$.

3.



4.

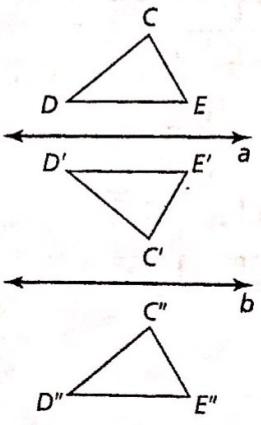


In Exercises 5 and 6, determine whether the polygons with the given vertices are congruent. Use transformations to explain your reasoning.

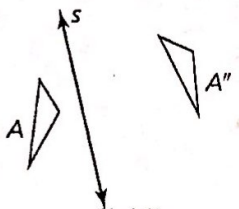
5. $A(5, 2), B(2, 2), C(2, 7)$ and $S(-4, -5), T(-1, -5), U(-1, 0)$

6. $E(6, -2), F(10, -2), G(10, -8), H(6, -8)$ and $W(4, 8), X(4, 10), Y(8, 10), Z(8, 8)$

7. In the figure, $a \parallel b$, $\triangle CDE$ is reflected in line a, and $\triangle C'D'E'$ is reflected in line b. List three pairs of segments that are parallel to each other. Then determine whether any segments are congruent to $\overline{EE''}$.



8. $\triangle A$ is reflected in line s to form $\triangle A'$ and then reflected in line t to form $\triangle A''$. Draw line t and intermediate $\triangle A'$ to complete the figure that represents these transformations.



9. Your friend claims that if you have a series of many parallel lines, reflecting a figure in two of the lines will produce the same result as reflecting the image in four or six of the lines. Is your friend correct? Explain your reasoning.