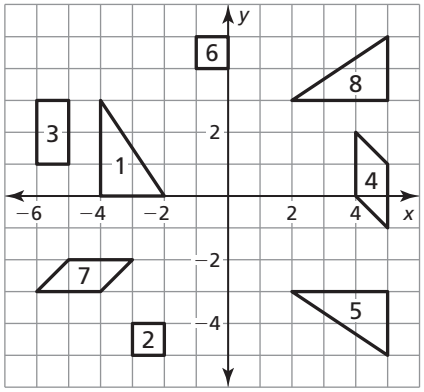
Name_____ Date _____

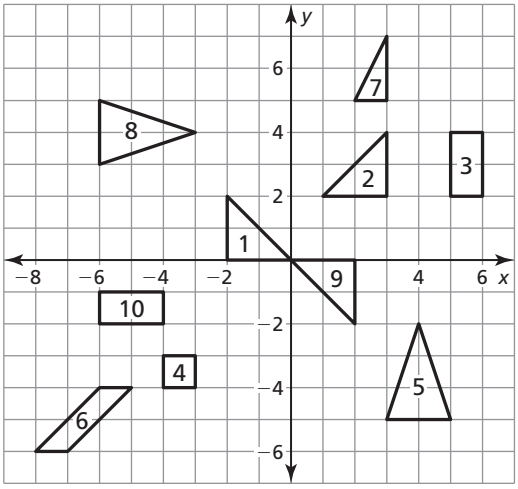
11.4 Practice A

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

1.

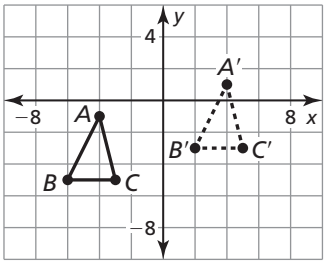


2.

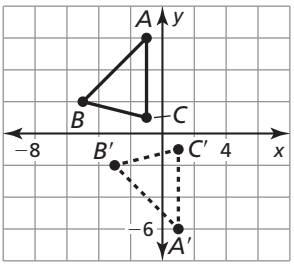


In Exercises 3 and 4, describe a congruence transformation that maps $\triangle ABC$ to $\triangle A'B'C'$.

3.



4.

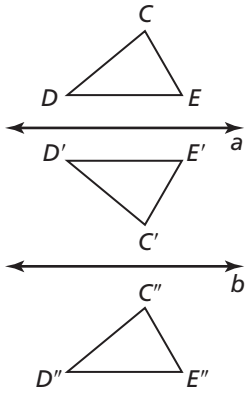


In Exercises 5 and 6, determine whether the polygons with the given vertices are congruent. Use transformations to explain your reasoning.

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 $\overline{EE''}$.



In Exercises 8 and 9, find the measure of the acute or right angle formed by intersecting lines so that *P* can be mapped to *P″* using two reflections.

8. A rotation of $28°$ maps P to P''.

9. The rotation $(x, y) \rightarrow (-y, x)$ maps P to P''.