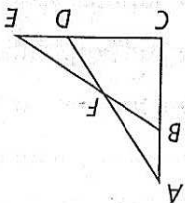


Short Response

9. What is the midpoint of a segment with endpoints at  $(-2, 2)$  and  $(5, 10)$ ?

Use the figure at the right for Exercises 10-12.

Given:  $\overline{AB} \cong \overline{ED}$ ,  $\overline{BC} \cong \overline{DC}$



11. Which reason could you use to prove  $\angle C \cong \angle C$ ?

12. Which reason could you use to prove  $\triangle ACD \cong \triangle ECB$ ?

13. What is the slope of a line that passes through  $(-3, 5)$  and  $(4, 3)$ ?

14. What is the slope of a line that is perpendicular to the line that passes through  $(-2, -2)$  and  $(1, 3)$ ?

Extended Response

15. Draw  $\triangle ABC \cong \triangle EFG$ . Write all six congruence statements.

16. The coordinates of rectangle  $HJKL$  are  $H(-4, 1)$ ,  $I(1, 1)$ ,  $J(1, -2)$ , and  $K(-4, -2)$ . The coordinates of rectangle  $LMNO$  are  $L(-1, 3)$ ,  $M(2, 3)$ ,  $N(2, -3)$ , and  $O(-1, -3)$ . Are these two rectangles congruent? Explain. If not, how could you change the coordinates of one of the rectangles to make them congruent?