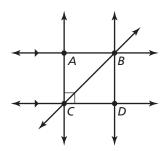
3.1 Practice A

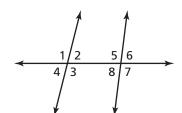
In Exercises 1-4, use the diagram.

- 1. Name a pair of parallel lines.
- 2. Name a pair of perpendicular lines.
- **3.** Is $\overrightarrow{AB} \parallel \overrightarrow{BC}$? Explain.
- **4.** Is $\overrightarrow{BD} \perp \overrightarrow{CD}$? Explain.

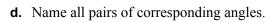


In Exercises 5-8, identify all pairs of angles of the given type.

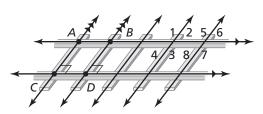
- **5.** alternate interior
- **6.** alternate exterior
- 7. corresponding
- **8.** consecutive interior



- **9.** How many pairs of consecutive interior angles do you have when two horizontal lines are intersected by a transversal? How many pairs of consecutive interior angles do you have when three horizontal lines are intersected by a transversal? How many pairs of consecutive interior angles do you have when *n* horizontal lines are intersected by a transversal?
- **10.** The given markings show how the railroad ties on a railroad track are related to each other.
 - **a.** Name two pairs of parallel lines.
 - **b.** Name two pairs of perpendicular lines.
 - **c.** Name all pairs of consecutive interior angles.



- **e.** Name all pairs of alternate interior angles.
- **f.** Name all pairs of alternate exterior angles.

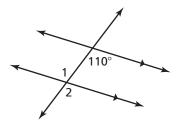


Notetaking with Vocabulary (continued)

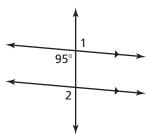
Extra Practice

In Exercises 1-4, find $m \angle 1$ and $m \angle 2$. Tell which theorem you use in each case.

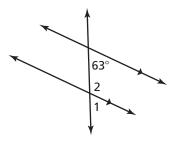
1.



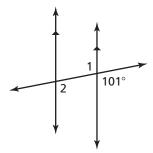
3.



2.

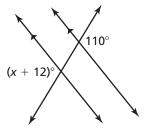


4.

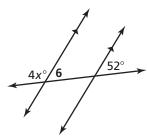


In Exercises 5–8, find the value of x. Show your steps.

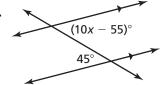
5



7.



6



8.

