

**LESSON**  
**1-6**

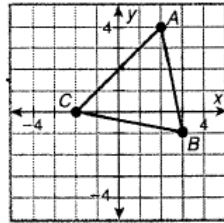
## Practice B

### Midpoint and Distance in the Coordinate Plane

Find the coordinates of the midpoint of each segment.

1.  $\overline{TU}$  with endpoints  $T(5, -1)$  and  $U(1, -5)$  \_\_\_\_\_
2.  $\overline{VW}$  with endpoints  $V(-2, -6)$  and  $W(x + 2, y + 3)$  \_\_\_\_\_
3.  $Y$  is the midpoint of  $\overline{XZ}$ .  $X$  has coordinates  $(2, 4)$ , and  $Y$  has coordinates  $(-1, 1)$ . Find the coordinates of  $Z$ . \_\_\_\_\_

Use the figure for Exercises 4–7.



4. Find  $AB$ . \_\_\_\_\_
5. Find  $BC$ . \_\_\_\_\_
6. Find  $CA$ . \_\_\_\_\_
7. Name a pair of congruent segments. \_\_\_\_\_

Find the distances.

8. Use the Distance Formula to find the distance, to the nearest tenth, between  $K(-7, -4)$  and  $L(-2, 0)$ . \_\_\_\_\_
9. Use the Pythagorean Theorem to find the distance, to the nearest tenth, between  $F(9, 5)$  and  $G(-2, 2)$ . \_\_\_\_\_

**Use the figure for Exercises 10 and 11.**

Snooker is a kind of pool or billiards played on a 6-foot-by-12-foot table. The side pockets are halfway down the rails (long sides).

10. Find the distance, to the nearest tenth of a foot, diagonally across the table from corner pocket to corner pocket.

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11. Find the distance, to the nearest tenth of an inch, diagonally across the table from corner pocket to side pocket.

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