Geometry Unit 1
Bookwork chapter 1 section 6

Name _____
Date _____
Period _____

LESSON 1-6

Practice B

Midpoint and Distance in the Coordinate Plane

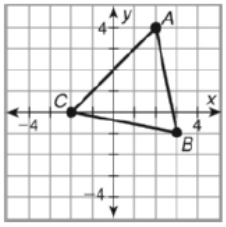
Find the coordinates of the midpoint of each segment.

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. _____

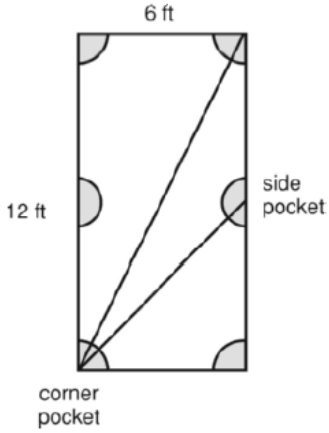
Find the distances.

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.

_____

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

_____

Practice B

1. (3, –3)
2. $\left(\frac{x}{2}, \frac{y-3}{2}\right)$
3. (–4, –2)
4. $\sqrt{26}$ units
5. $\sqrt{26}$ units
6. $4\sqrt{2}$ units
7. $\overline{AB}$ and $\overline{BC}$
8. 6.4 units
9. 11.4 units
10. 13.4 ft
11. 101.8 in.