Green Textbook p47 #1-8, 23, 26, 27, 30

1. **Vocabulary** The ___?___ is the side of a right triangle that is directly across from the right angle. (*hypotenuse* or *leg*)

**Find the coordinates of the midpoint of each segment.**

2. $\overline{AB}$ with endpoints $A(4, -6)$ and $B(-4, 2)$

3. $\overline{CD}$ with endpoints $C(0, -8)$ and $D(3, 0)$

4. M is the midpoint of $\overline{LN}$. L has coordinates $(-3, -1)$, and M has coordinates $(0, 1)$. Find the coordinates of N.

5. B is the midpoint of $\overline{AC}$. A has coordinates $(-3, 4)$, and B has coordinates $\left(-1\frac{1}{2}, 1\right)$. Find the coordinates of C.

Multi-Step Find the length of the given segments and determine if they are congruent.
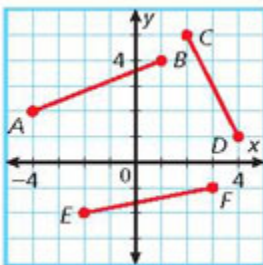
6. $\overline{JK}$ and $\overline{FG}$ 7. $\overline{JK}$ and $\overline{RS}$

Use the Distance Formula and the Pythagorean Theorem to find the distance, to the nearest tenth, between each pair of points.

8. $A(1, -2)$ and $B(-4, -4)$
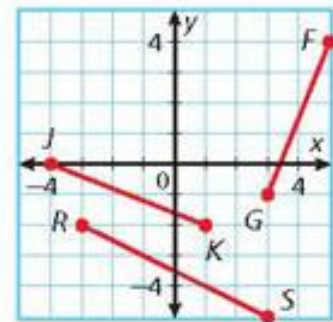
23. Use the Pythagorean Theorem to find the distance from A to E. Round to the nearest hundredth.

On the map, each square of the grid represents 1 square mile. Find each distance to the nearest tenth of a mile.

26. Find the distance along Highway 201 from Cedar City to Milltown.

27. A car breaks down on Route 1, at the midpoint between Jefferson and Milltown. A tow truck is sent out from Jefferson. How far does the truck travel to reach the car?
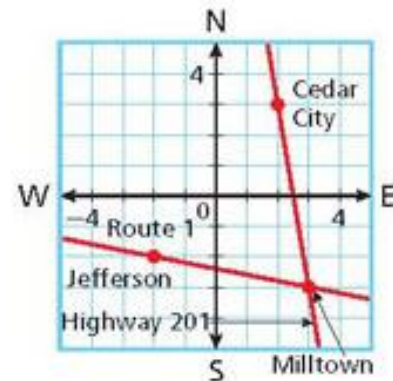
The coordinates of the vertices of $\triangle ABC$ are $A(1, 4)$, $B(-2, -1)$, and $C(-3, -2)$.

30. Find the perimeter of $\triangle ABC$ to the nearest tenth.