1.6 Homework

P: 47: 2, 4, 6, 22, 24, 29, 32, 35

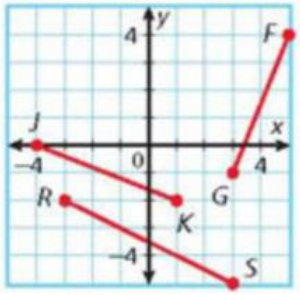
Find the coordinates of the midpoint of each segment.

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

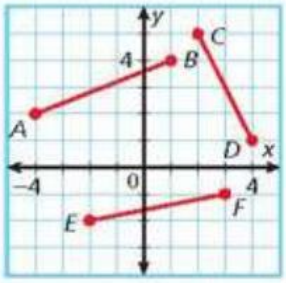
4. M is the midpoint of $\overline{LN}$. L has coordinates $(-3, -1)$, and M has coordinates $(0, 1)$. Find the coordinates of N.

Multi-Step **Find the length of the given segments and determine if they are congruent.**

6. $\overline{JK}$ and $\overline{FG}$



22. **Multi-Step** Use the Distance Formula to order $\overline{AB}$, $\overline{CD}$, and $\overline{EF}$ from shortest to longest.



24. X has coordinates $(a, 3a)$, and Y has coordinates $(-5a, 0)$. Find the coordinates of the midpoint of $\overline{XY}$.

29. **Critical Thinking** Give an example of a line segment with midpoint $(0, 0)$.

32. **Write About It** Explain why the Distance Formula is not needed to find the distance between two points that lie on a horizontal or a vertical line.

35. Find the distance, to the nearest tenth, between the midpoints of $\overline{LM}$ and $\overline{JK}$.

Ⓕ 1.8 Ⓗ 4.0

Ⓖ 3.6 Ⓙ 5.3