Lesson 3: Name points using coordinate pairs, and use the coordinate pairs to plot points.

1. Use the grid below to complete the following tasks.
   a. Construct an x-axis that passes through points A and B.
   b. Construct a perpendicular y-axis that passes through points C and F.
   c. Label the origin as 0.
   d. The x-coordinate of B is 5 2/3. Label the whole numbers along the x-axis.
   e. The y-coordinate of C is 5 1/3. Label the whole numbers along the y-axis.
Lesson 3 Problem Set

2. For all of the following problems, consider the points A through N on the previous page.

   a. Identify all of the points that have an x-coordinate of $3 \frac{1}{3}$.

   b. Identify all of the points that have a y-coordinate of $2 \frac{2}{3}$.

   c. Which point is $3 \frac{1}{3}$ units above the x-axis and $2 \frac{2}{3}$ units to the right of the y-axis? Name the point, and give its coordinate pair.

   d. Which point is located $5 \frac{1}{3}$ units from the y-axis?

   e. Which point is located $1 \frac{2}{3}$ units along the x-axis?

   f. Give the coordinate pair for each of the following points.

      $K$: _______  $I$: _______  $B$: _______  $C$: _______

   g. Name the points located at the following coordinates.

      $(1 \frac{2}{3}, \frac{2}{3})$ _______  $(0, 2 \frac{2}{3})$ _______  $(1, 0)$ _______  $(2, 5 \frac{2}{3})$ _______

   h. Which point has an equal x- and y-coordinate? _______

   i. Give the coordinates for the intersection of the two axes. (_____, ____ ) Another name for this point on the plane is the ____________.

   j. Plot the following points.

      $P$: $(4 \frac{1}{3}, 4)$  $Q$: $(\frac{1}{3}, 6)$  $R$: $(4 \frac{2}{3}, 1)$  $S$: $(0, 1 \frac{2}{3})$

   k. What is the distance between $E$ and $H$, or $EH$?
Lesson 3 Problem Set

What is the length of $HD$?

Would the length of $ED$ be greater or less than $EH + HD$?

Jack was absent when the teacher explained how to describe the location of a point on the coordinate plane. Explain it to him using point $J$. 