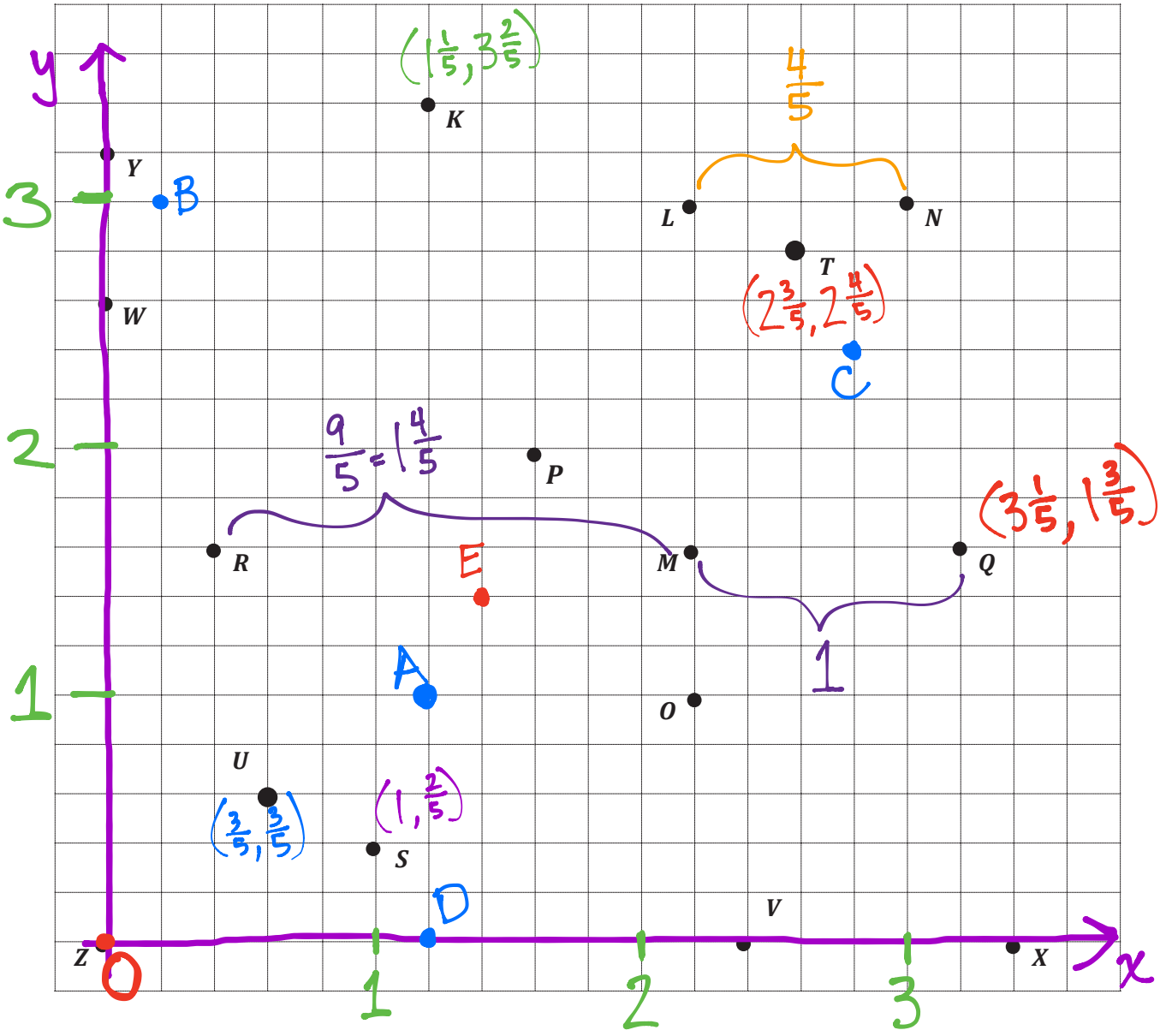
Name _____ Date _____

1. Use the grid below to complete the following tasks.
   a. Construct a y-axis that passes through points Y and Z.
   b. Construct a perpendicular x-axis that passes through points Z and X.
   c. Label the origin as 0.
   d. The y-coordinate of W is $2\frac{3}{5}$. Label the whole numbers along the y-axis.
   e. The x-coordinate of V is $2\frac{2}{5}$. Label the whole numbers along the x-axis.



2. For all of the following problems, consider the points K through X on the previous page.

   a. Identify all of the points that have a y-coordinate of $1\frac{3}{5}$. R, M, Q

   b. Identify all of the points that have an x-coordinate of $2\frac{1}{5}$. O, M, L

   c. Which point is $1\frac{3}{5}$ units above the x-axis *and* $3\frac{1}{5}$ units to the right of the y-axis? Name the point and give its coordinate pair. Q

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

   e. Which point is located $\frac{2}{5}$ units along the x-axis? R

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

   T: $(2\frac{3}{5}, 2\frac{4}{5})$ U: $(\frac{3}{5}, \frac{3}{5})$ S: $(1, \frac{2}{5})$ K: $(1\frac{1}{5}, 3\frac{2}{5})$

   g. Name the points located at the following coordinates.

   $(\frac{3}{5}, \frac{3}{5})$ U $(3\frac{2}{5}, 0)$ X $(2\frac{1}{5}, 3)$ L $(0, 2\frac{3}{5})$ W

   h. Plot a point whose x- and y-coordinates are equal. Label your point E. Answers will vary.

   i. What is the name for the point on the plane where the two axes intersect? Origin Give the coordinates for this point. (0 , 0)

   j. Plot the following points.

   A: $(1\frac{1}{5}, 1)$ B: $(\frac{1}{5}, 3)$ C: $(2\frac{4}{5}, 2\frac{2}{5})$ D: $(1\frac{1}{5}, 0)$

   k. What is the distance between L and N, or LN? $\frac{4}{5}$

   l. What is the distance of MQ? 1

   m. Would RM be greater than, less than, or equal to $LN + MQ$? Equal

   n. Leslie was explaining how to plot points on the coordinate plane to a new student, but she left off some important information. Correct her explanation so that it is complete.

   "All you have to do is read the coordinates; for example, if it says (4, 7), count four, then seven, and put a point where the two grid lines intersect."

She forgot to specify that 4 is on the X axis and that 7 is on the y axis.