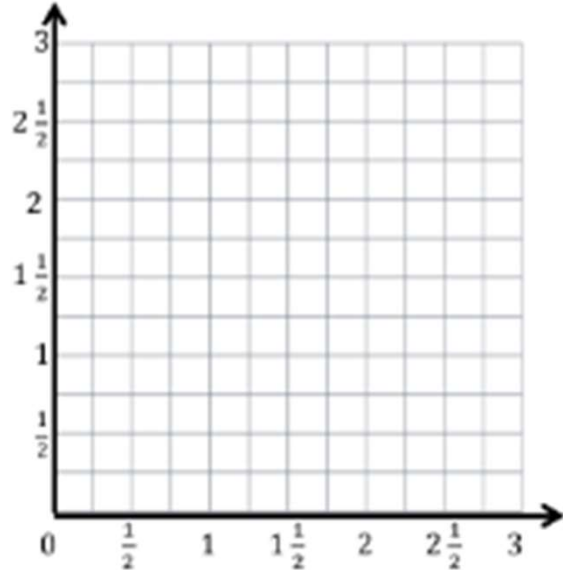


Coordinate Geometry Worksheets

2. Plot the following points on the coordinate plane to the right.

$$P: (1\frac{1}{2}, \frac{1}{2}) \quad Q: (1\frac{1}{2}, 2\frac{1}{2})$$

$$R: (1\frac{1}{2}, 1\frac{1}{4}) \quad S: (1\frac{1}{2}, \frac{3}{4})$$



- Use a straightedge to draw a line to connect these points. Label the line ℓ .
- In line ℓ , $x = \underline{\hspace{2cm}}$ for all values of y .
- Circle the correct word.

Line ℓ is *parallel* *perpendicular* to the x -axis.

Line ℓ is *parallel* *perpendicular* to the y -axis.

- What pattern occurs in the coordinate pairs that let you know that line ℓ is vertical?
3. For each pair of points below, think about the line that joins them. For which pairs is the line parallel to the x -axis? Circle your answer(s). Without plotting them, explain how you know.

a. $(1.4, 2.2)$ and $(4.1, 2.4)$

b. $(3, 9)$ and $(8, 9)$

c. $(1\frac{1}{4}, 2)$ and $(1\frac{1}{4}, 8)$

4. For each pair of points below, think about the line that joins them. For which pairs is the line parallel to the y -axis? Circle your answer(s). Then, give 2 other coordinate pairs that would also fall on this line.

a. $(4, 12)$ and $(6, 12)$

b. $(\frac{3}{5}, 2\frac{3}{5})$ and $(\frac{1}{5}, 3\frac{1}{5})$

c. $(0.8, 1.9)$ and $(0.8, 2.3)$

Coordinate Geometry Worksheets

2. Plot the following points on the coordinate plane to the right.

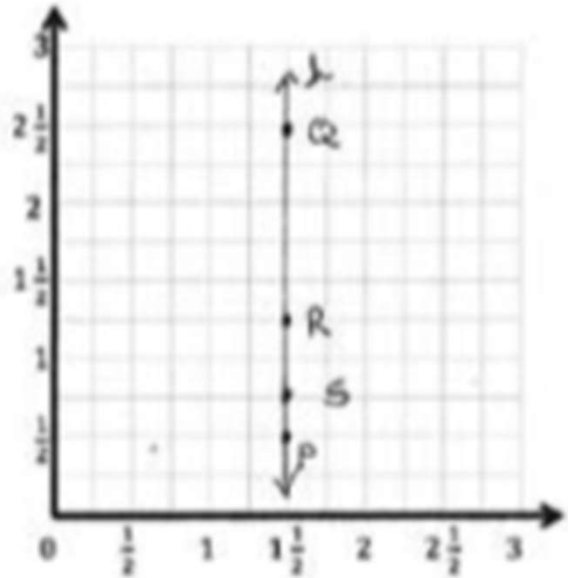
$P: (1\frac{1}{2}, \frac{1}{2})$ $Q: (1\frac{1}{2}, 2\frac{1}{2})$

$R: (1\frac{1}{2}, 1\frac{1}{4})$ $S: (1\frac{1}{2}, \frac{3}{4})$

- Use a straight edge to draw a line to connect these points. Label the line **A**.
- In line **A** $x = 1\frac{1}{2}$ for all values of y .
- Circle the correct word.

Line **A** is parallel perpendicular to the x -axis.

Line **A** is parallel perpendicular to the y -axis.



- What pattern occurs in the coordinate pairs that let you know that line **A** is vertical?
All of the x values are the same, but the y values are different.

3. For each pair of points below, think about the line that joins them. For which pairs is the line parallel to the x -axis? Circle your answer(s). Without plotting them, explain how you know.

a. $(1.4, 2.2)$ & $(4.1, 2.4)$

b. $(3, 9)$ & $(8, 9)$

c. $(1\frac{1}{4}, 2)$ & $(1\frac{1}{4}, 8)$

If the y values are the same, the line is parallel to the x -axis. Answer b was the only choice like that.

4. For each pair of points below, think about the line that joins them. For which pairs is the line parallel to the y -axis? Circle your answer(s). Then, give 2 other coordinate pairs that would also fall on this line.

a. $(4, 12)$ & $(6, 12)$

b. $(\frac{1}{3}, 2\frac{1}{3})$ & $(\frac{1}{3}, 3\frac{1}{3})$

c. $(0.8, 1.9)$ & $(0.8, 2.3)$

$(0.8, 2.4)$ and $(0.8, 5)$