Reasoning and Problem Solving
Position in the First Quadrant

Developing

1a. O

2a. Accept any coordinates that would make a triangle, for example; (5, 5) (5, 2) (3, 3)

3a. False, the coordinates make a straight vertical line which runs up and down, all the x values are the same so it is a straight line.

Expected

4a. P

5a. Accept any coordinates that would make a quadrilateral, for example; (1, 7) (8, 7) (8, 3) (1, 3)

6a. True. If you know 3 coordinates you know the direction of the square and can calculate which point is missing.

Greater Depth

7a. S

8a. Accept any coordinates that would make a pentagon, for example; (8, 4) (12, 13) (2, 10) (6, 14) (14, 8)

9a. False. The values of the coordinates can be fractions and still be plotted, they will just be in the spaces between the lines if the grid shows only integers on the scales.

Reasoning and Problem Solving
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1b. T

2b. Accept any coordinates that would make a triangle, for example; (3, 3) (4, 3) (2, 1)

3b. True, the line is horizontal as all the y values are the same. Also (0,4) would be the next point on the left while (4,4) would be the next value on the right.

Expected

4b. S

5b. Accept any coordinates that would make a quadrilateral, for example; (6, 2) (8, 2) (8, 8) (6, 8)

6b. True. If the x value changes, the line will go horizontally. If the y value changes, it will go vertically.

Greater Depth

7b. H

8b. Accept any coordinates that would make a hexagon, for example; (4, 10) (17, 4) (6, 4) (16, 16) (6, 16) (20, 10)

9b. False. The shape can move off the grid as you could draw more squares to make a bigger grid. If you know the scale on the x axis and the y axis, you can work out the new coordinates without drawing more of the grid.