

Homework/Extension

Step 2: Four Quadrants

National Curriculum Objectives:

Mathematics Year 6: (6P3) [Describe positions on the full coordinate grid \(all four quadrants\)](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Plot the coordinates in all four quadrants to identify if the statement about the shape formed is true or false. Includes grids from -5 to 5 with 3 or 4 points plotted, spanning two quadrants per question.

Expected Plot the coordinates in all four quadrants to identify if the statement about the shape formed is true or false. Includes grids from -5 to 5 with 3 or 4 points plotted.

Greater Depth Plot the coordinates in all four quadrants to identify if the statement about the shape formed is true or false. Up to 6 points plotted, including irregular shapes. Includes grids of varying scales with some points plotted between increments.

Questions 2, 5 and 8 (Varied Fluency)

Developing Read the coordinates to identify the missing coordinate for each shape. Includes grids from -5 to 5 with 3 or 4 points plotted, spanning two quadrants per question.

Expected Read the coordinates to identify the missing coordinate for each shape. Includes grids from -5 to 5 with 3 or 4 points plotted.

Greater Depth Read the coordinates to identify the missing coordinate for each shape. Up to 6 points plotted, including irregular shapes. Includes grids of varying scales with some points plotted between increments.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Read the coordinates to identify which has not been plotted on the grid. Includes grids from -5 to 5 with 3 or 4 points plotted, spanning two quadrants per question.

Expected Read the coordinates to identify which has not been plotted on the grid. Includes grids from -5 to 5 with 3 or 4 points plotted.

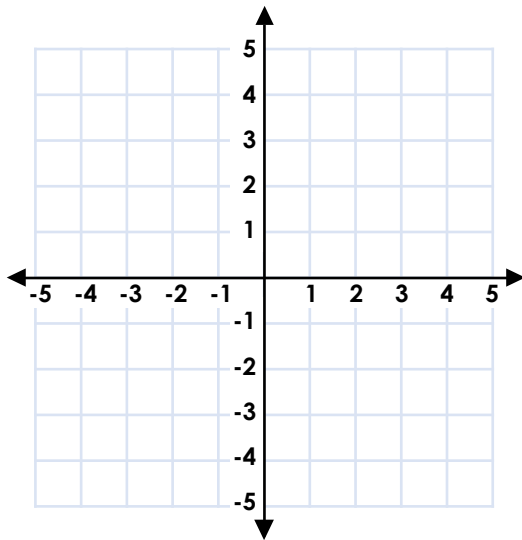
Greater Depth Read the coordinates to identify which has not been plotted on the grid. Up to 6 points plotted, including irregular shapes. Includes grids of varying scales with some points plotted between increments.

More [Year 6 Position and Direction](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Four Quadrants

1. True or false? When plotted, the coordinates form a triangle.

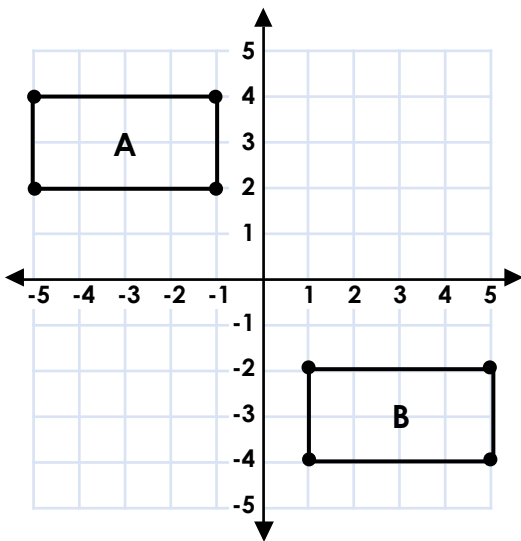


- (-3, 1)
- (-1, 3)
- (1, 1)



VF
HW/Ext

2. Find the missing coordinates from the shapes below.



- A**
- (-1, 2)
 - (-1, 4)
 - (__, __)
 - (-5, 4)

- B**
- (1, -2)
 - (__, __)
 - (5, -2)
 - (5, -4)



VF
HW/Ext

3. Liz and Sam are drawing a rectangle on a grid.



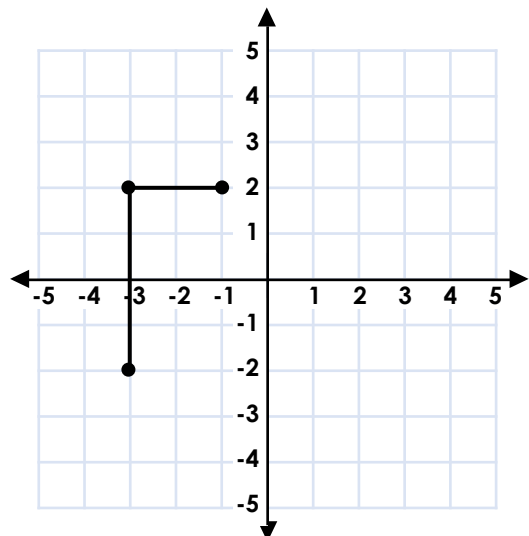
Liz

We need to plot the coordinate (-1, -2) to complete the rectangle.



Sam

We need to plot the coordinate (-2, -1) to complete the rectangle.



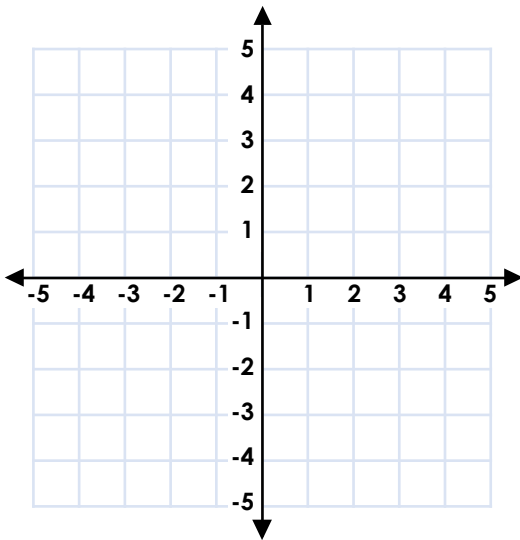
Who is correct? Explain your reasoning.



RPS
HW/Ext

Four Quadrants

4. True or false? When plotted, the coordinates form a square.

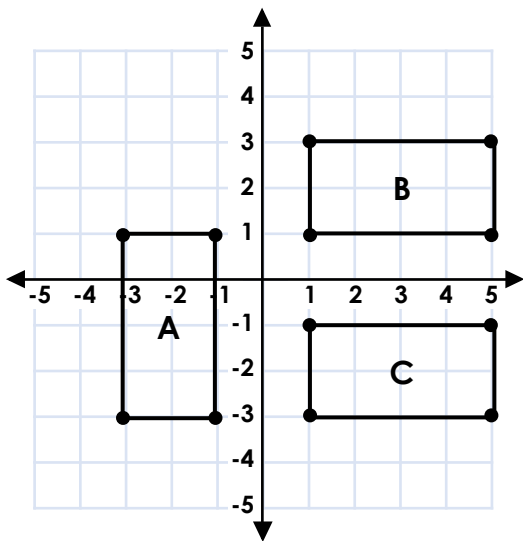


- (-2, 3)
- (-2, -1)
- (4, -1)
- (4, 3)



VF
HW/Ext

5. Find the missing coordinates from the shapes below.



- A**
- (-1, 1)
 - (__, __)
 - (-3, -3)
 - (-3, 1)

- B**
- (1, 1)
 - (1, 3)
 - (__, __)
 - (5, 1)

- C**
- (1, -1)
 - (1, -3)
 - (5, -3)
 - (__, __)



VF
HW/Ext

6. Kay and Dan are drawing a square on a grid.



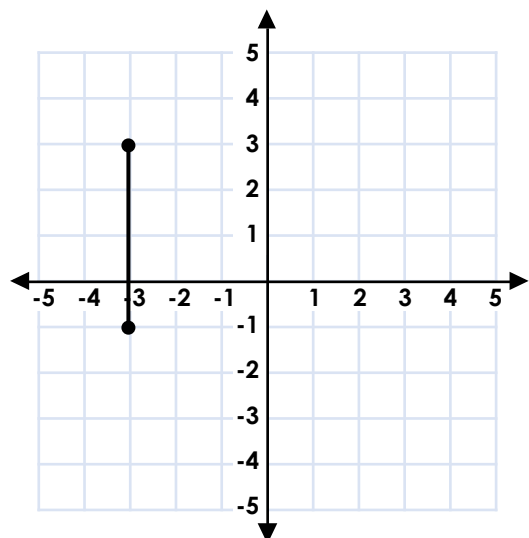
Kay

We need to plot the coordinates (1, 3) and (1, -1) to complete the square.



Dan

We need to plot the coordinates (3, 1) and (-1, 1) to complete the square.



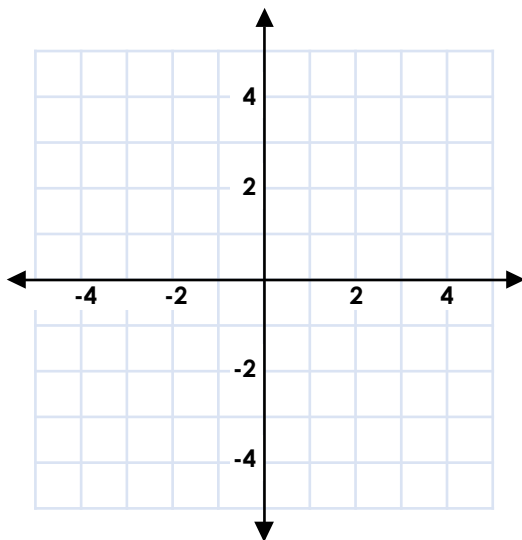
Who is correct? Explain your reasoning.



RPS
HW/Ext

Four Quadrants

7. True or false? When plotted, the coordinates form an irregular pentagon.

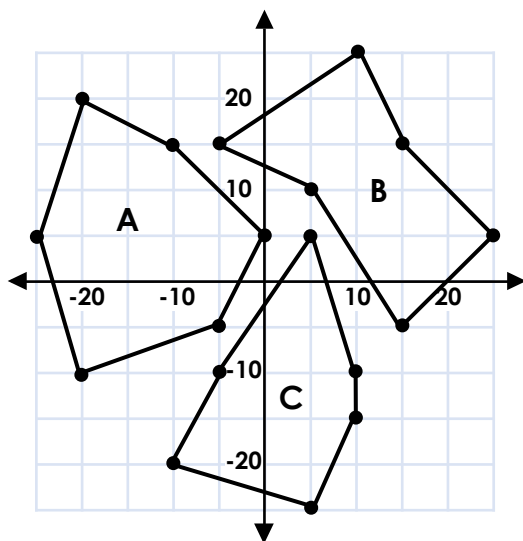


- | |
|----------|
| (0, 3) |
| (-2, 1) |
| (2, 1) |
| (2, -3) |
| (-2, -3) |



VF
HW/Ext

8. Find the missing coordinates from the shapes below.



- | A |
|-----------|
| (0, 5) |
| (-5, -5) |
| (_, _) |
| (-25, 5) |
| (-20, 20) |
| (-10, 15) |

- | B |
|----------|
| (-5, 15) |
| (10, 25) |
| (_, _) |
| (25, 5) |
| (15, -5) |
| (5, 10) |

- | C |
|-----------|
| (5, 5) |
| (10, -10) |
| (10, -15) |
| (5, -25) |
| (_, _) |
| (-5, -10) |



VF
HW/Ext

9. Jen and Ali are drawing a hexagon on a grid.



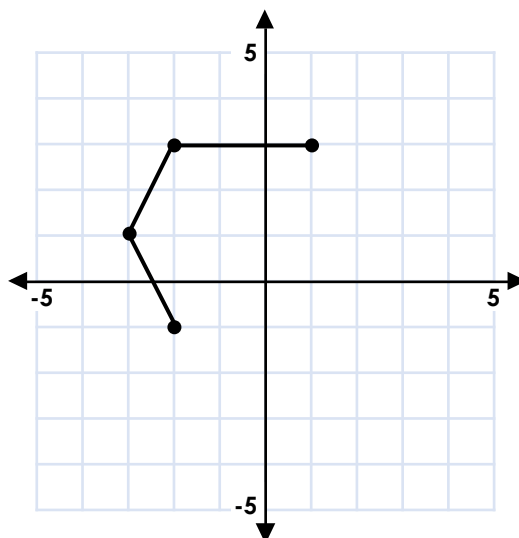
Jen

We need to plot the coordinates (3, 3) and (-1, 1) to complete the hexagon.



Ali

We need to plot the coordinates (1, -1) and (2, 1) to complete the hexagon.



Who is correct? Explain your reasoning.



RPS
HW/Ext

Homework/Extension

Four Quadrants

Developing

1. **True**
2. **$A = (-5, 2)$; $B = (1, -4)$**
3. **Liz is correct because a rectangle needs 4 straight sides with 2 pairs of equal sides.**

Expected

4. **False, the coordinates form a rectangle when plotted.**
5. **$A = (-1, -3)$; $B = (5, 3)$; $C = (5, -1)$**
6. **Kay is correct because the coordinates of the x-axis are written first.**

Greater Depth

7. **True**
8. **$A = (-20, -10)$; $B = (15, 15)$; $C = (-10, -20)$**
9. **Ali is correct. Jen's coordinates do not create a 6-sided shape.**