

# Varied Fluency

## Step 1: Position in the First Quadrant

### National Curriculum Objectives:

Mathematics Year 5: (5P2) [Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed](#)

### Differentiation:

**Developing** Questions to support understanding position in the first quadrant. Using up to 4 points, all plotted on a 5 x 5 grid, using 1:1 scale.

**Expected** Questions to support understanding position in the first quadrant. Using up to 6 points, all plotted on a 10 x 10 grid, using 1:1 scale.

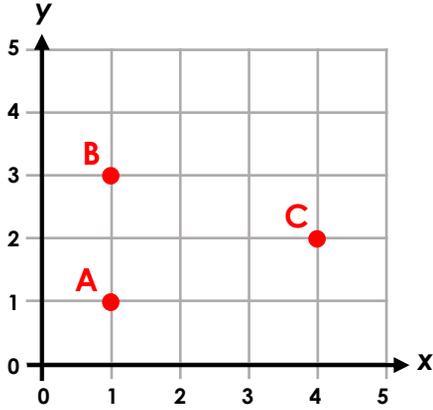
**Greater Depth** Questions to support understanding position in the first quadrant. Using up to 6 points, all plotted on a 10 x 10 grid, using varying scales with some points plotted between increments.

More [Year 5 Position and Direction](#) resources

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

# Position in the First Quadrant

1a. Write the coordinates of all the marked points on the grid.



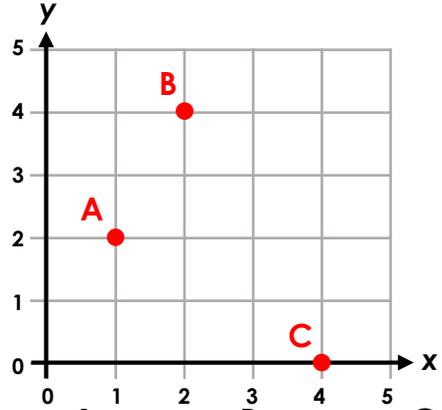
A  B  C



VF

# Position in the First Quadrant

1b. Write the coordinates of all the marked points on the grid.

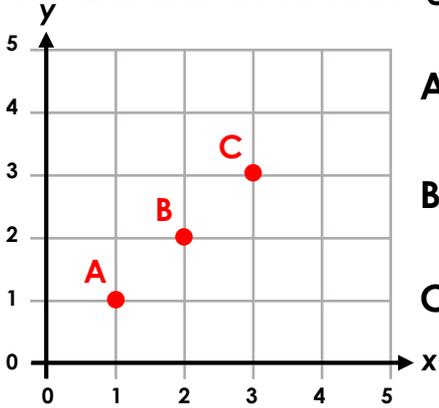


A  B  C



VF

2a. Each point moves one square up. Write the new coordinates of each new point and draw them on the grid.

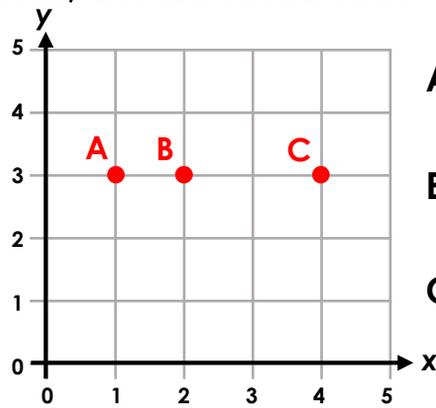


A   
B   
C



VF

2b. Each point is moved one square down. Write the new coordinates of each point, and draw them on the grid.

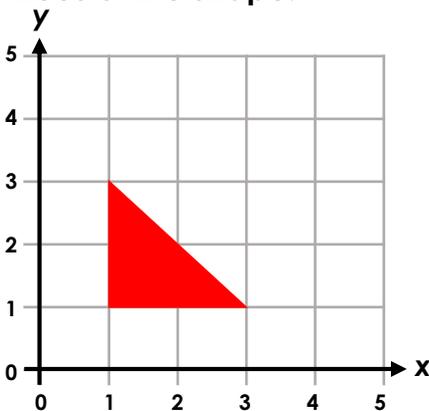


A   
B   
C



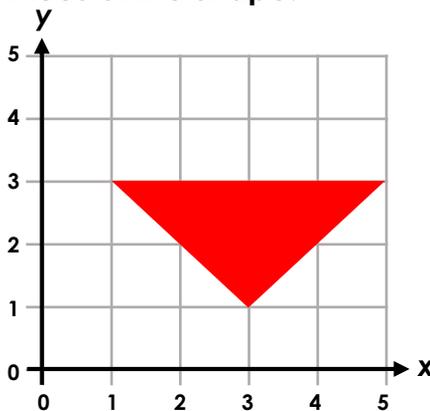
VF

3a. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.



VF

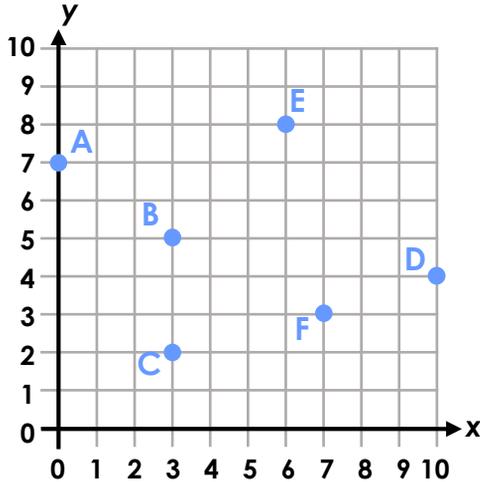
3b. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.



VF

## Position in the First Quadrant

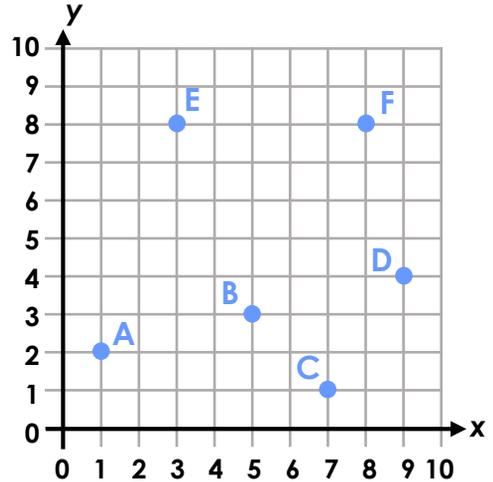
4a. Write the coordinates of all the marked points on the grid.



VF

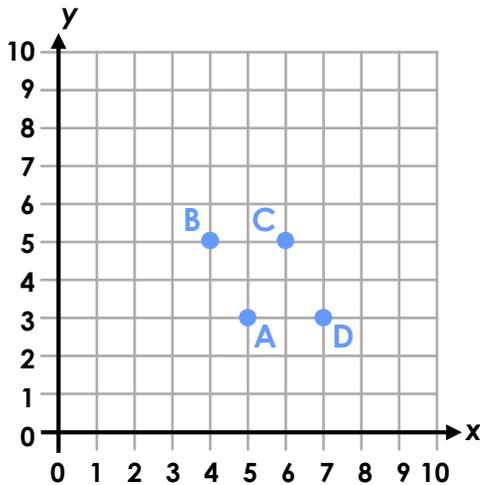
## Position in the First Quadrant

4b. Write the coordinates of all the marked points on the grid.



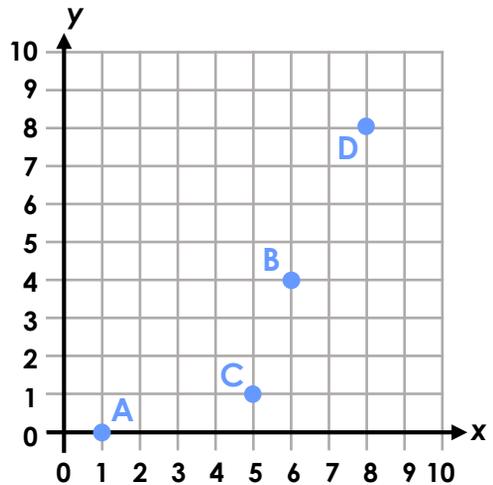
VF

5a. Each point moves two squares up. Write the new coordinates of each point.



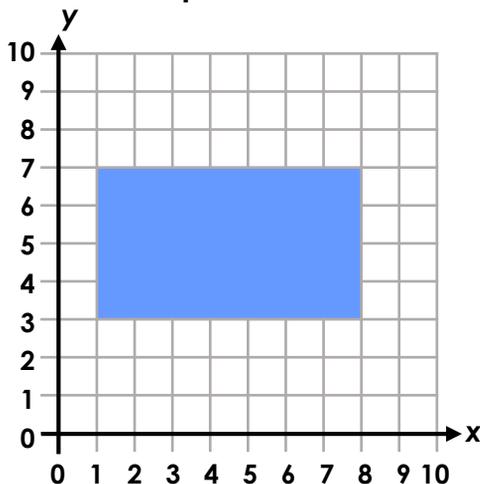
VF

5b. Each point moves two squares right. Write the new coordinates of each point.



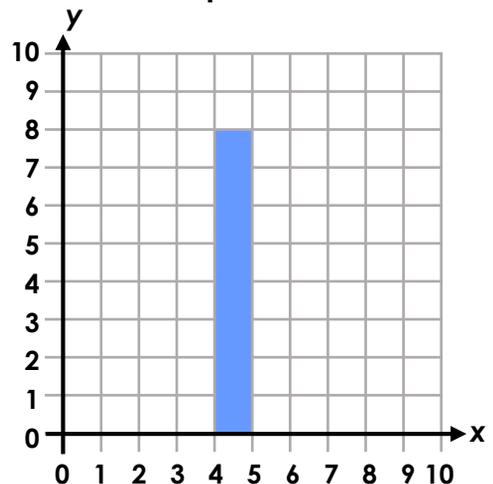
VF

6a. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.



VF

6b. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.

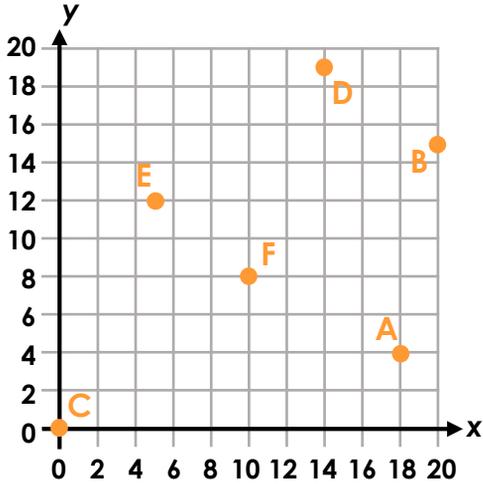


VF

# Position in the First Quadrant

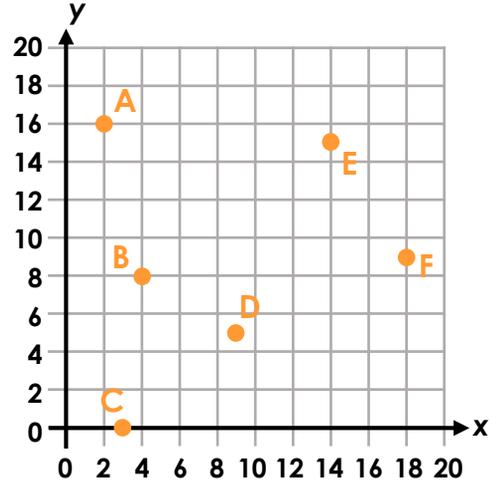
# Position in the First Quadrant

7a. Write the coordinates of all the marked points on the grid.



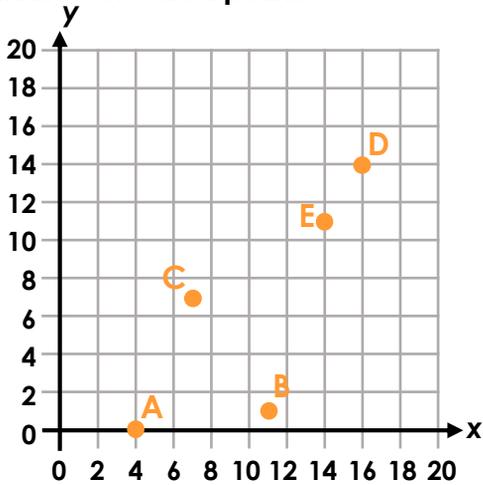
VF

7b. Write the coordinates of all the marked points on the grid.



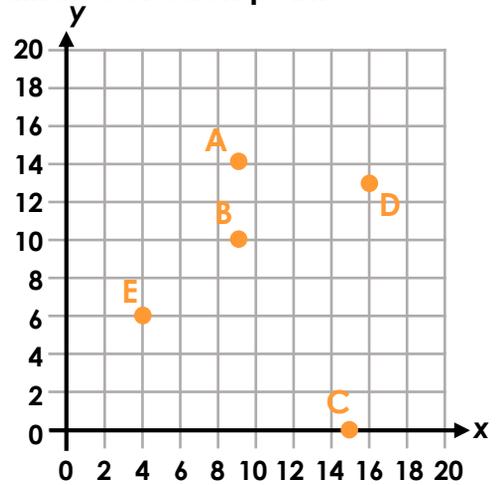
VF

8a. Each point moves one square left and three squares up. Write the new coordinates of each point.



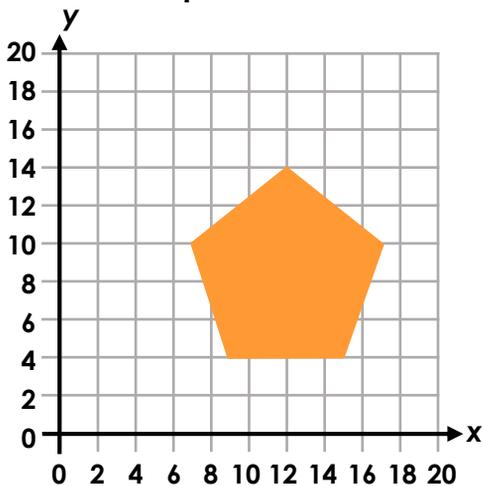
VF

8b. Each point moves two squares right and three squares up. Write the new coordinates of each point.



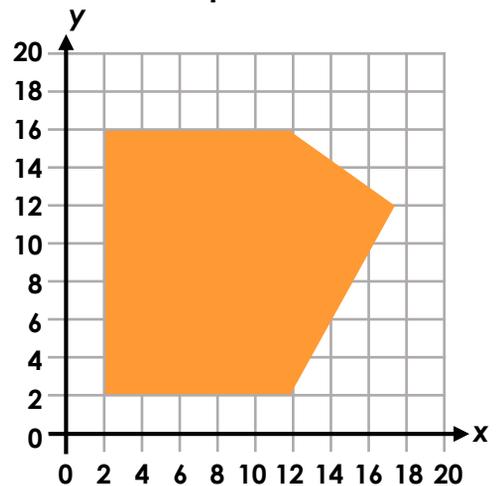
VF

9a. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.



VF

9b. Look at the shape drawn on the grid below. Write the coordinates of the vertices of the shape.



VF

**Varied Fluency**  
**Position in the First Quadrant**

**Developing**

- 1a. A (1, 1); B (1, 3); C (4, 2)  
2a. A (1, 2); B (2, 3); C (3, 4)  
3a. Vertices plotted from top left clockwise  
(1, 3) (3, 1) (1, 1)

**Expected**

- 4a. A (0, 7); B (3, 5); C (3, 2); D (10, 4); E (6, 8); F (7, 3)  
5a. A (5, 5); B (4, 7); C (6, 7); D (7, 5)  
6a. Vertices plotted from top left clockwise  
(1, 7) (8, 7) (8, 3) (1, 3)

**Greater Depth**

- 7a. A (18, 4); B (20, 15); C (0, 0); D (14, 19); E (5, 12); F (10, 8)  
8a. A (2, 6); B (9, 7); C (5, 13); D (14, 20); E (12, 17)  
9a. Vertices plotted from top left clockwise  
(12, 14) (17, 10) (15, 4) (9, 4) (7, 10)

**Varied Fluency**  
**Position in the First Quadrant**

**Developing**

- 1b. A (1, 2); B (2, 4); C (4, 0)  
2b. A (1, 2); B (2, 2); C (4, 2)  
3b. Vertices plotted from top left clockwise  
(1, 3) (5, 3) (3, 1)

**Expected**

- 4b. A (1, 2); B (5, 3); C (7, 1); D (9, 4); E (3, 8); F (8, 8)  
5b. A (3, 0); B (8, 4); C (7, 1); D (10, 8)  
6b. Vertices plotted from top left clockwise  
(4, 8) (5, 8) (5, 0) (4, 0)

**Greater Depth**

- 7b. A (2, 16); B (4, 8); C (3, 0); D (9, 5); E (14, 15); F (18, 9)  
8b. A (13, 20); B (13, 16); C (19, 6); D (20, 19); E (8, 12)  
9b. Vertices plotted from top left clockwise  
(2, 16) (12, 16) (17, 12) (12, 2) (2, 2)