# Homework/Extension Step 1: Describe Position

## National Curriculum Objectives:

Mathematics Year 4: (4P3a) <u>Describe positions on a 2-D grid as coordinates in the first</u> quadrant.

#### Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing State whether the coordinates given are true or false. Using up to 4 points, all points plotted on a 5x5 grid, using 1:1 scale.

Expected State whether the coordinates given are true or false. Using up to 6 points, all points plotted on a 10x10 grid, using 1:1 scale.

Greater Depth State whether the coordinates given are true or false. Using up to 6 points, all points plotted on a 10x10 grid, using varying scales with some points plotted between increments.

Questions 2, 5 and 8 (Varied Fluency)

Developing Identify symbols using given coordinates. Using up to 4 points, all points plotted on a 5x5 grid, using 1:1 scale.

Expected Identify symbols using given coordinates. Using up to 6 points, all points plotted on a 10x10 grid, using 1:1 scale.

Greater Depth Identify symbols using given coordinates. Using up to 6 points, all points plotted on a 10x10 grid, using varying scales with some points plotted between increments.

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

Developing Give the correct coordinates to make a given shape. Using up to 4 points, all points plotted on a 5x5 grid, using 1:1 scale.

Expected Give the correct coordinates to make a given shapes. Using up to 6 points, all points plotted on a 10x10 grid, using 1:1 scale.

Greater Depth Give the correct coordinates to make a given shapes. Using up to 6 points, all points plotted on a 10x10 grid, using varying scales with some points plotted between increments.

More Year 4 Position and Direction resources.

Did you like this resource? Don't forget to <u>review</u> it on our website.





## **Describe Position**

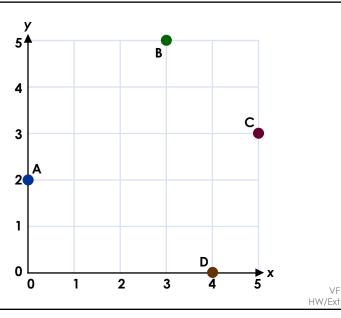
## 1. True or false?

Point 
$$A = (2, 0)$$

Point 
$$B = (3, 5)$$

Point 
$$C = (3, 5)$$

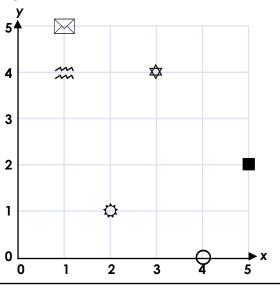
Point 
$$D = (4, 1)$$





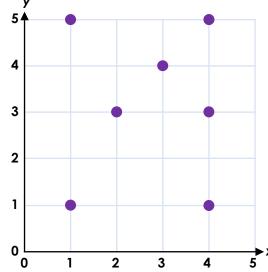
2. Which symbols can be found at the following coordinates?

$$C = (1, 5) =$$





3. Write the coordinates which join together to form a rectangle.



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RPS HW/Ext

## **Describe Position**

## 4. True or false?

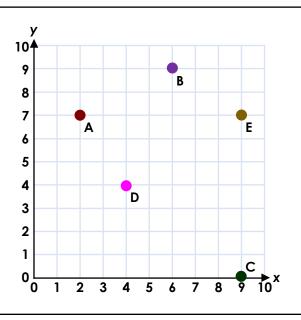
Point 
$$A = (2,7)$$

Point 
$$B = (9,6)$$

Point 
$$C = (8,1)$$

Point 
$$D = (4,4)$$

Point 
$$E = (9, 7)$$

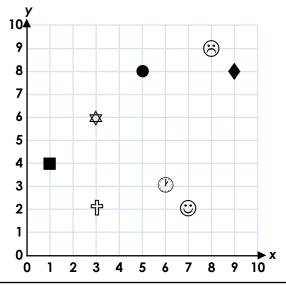




5. Which symbols can be found at the following coordinates?

$$B = (7, 2) =$$

$$C = (9, 8) =$$





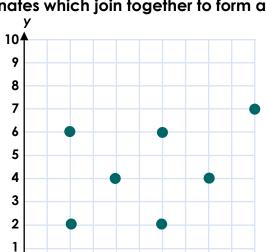
6. Find two sets of coordinates which join together to form a square.

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HW/Ext

## **Describe Position**

## 7. True or false?

Point 
$$A = (1, 6)$$

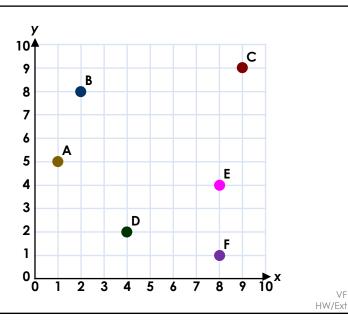
Point B = 
$$(2, 8)$$

Point 
$$C = (9, 9)$$

Point 
$$D = (5, 2)$$

Point 
$$E = (8, 4)$$

Point 
$$F = (1, 8)$$

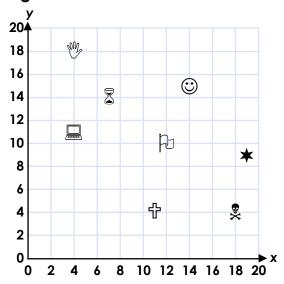




8. Which symbols can be found at the following coordinates?

$$B = (19, 9) = ____$$

$$C = (4, 18) = ____$$





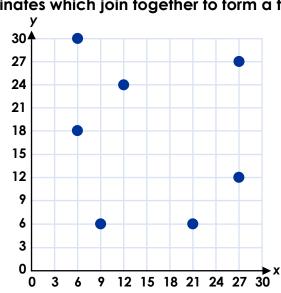
9. Find two sets of coordinates which join together to form a trapezium.

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## Homework/Extension Describe Position

#### **Developing**

1. True – point B

False – point A = (0,2); point C = (5,3) and point D = (4,0)

- 2. A. sun; B. star; C. envelope and D. circle
- 3. When joined, (1, 5), (4, 5), (4, 1) and (1, 1) form a rectangle.

#### **Expected**

4. True – points A, D and E

False – point B = (6,9); point C = (9,0)

- 5. A. star; B. smiley face; C. rhombus and D. square
- 6. When joined, (2,2), (6, 2), (6, 6) and (2, 6) make a square. When (4,4), (6,2), (6,6) and (8,4) are joined, they also form a square.

#### **Greater Depth**

7. True – points B, C and E

False – point A = (1,5); point D = (4,2) and point F(8,1)

- 8. A. cross; B. star; C. hand; D. smiley face; E. flag and F. timer
- 9. When joined, (6, 18), (12, 24), (9, 6) and (27, 27) make a trapezium. When (9, 6), (27, 27), (21, 6) and (27, 12) are joined, they also form a trapezium.



