PLOTTING COORDINATES ON A SET OF AXES.

Answer all of these questions. Remember to show your working out in all questions.

SPIRAL



S1.

A bag contains 4 red marbles and 6 blue marbles. What is the probability of picking a red marble?

S2.

Simplify 5a + 3b + 2a

S3.

Find the mean of 7, 9 and 11

S4.

Find the highest common factor of 18 and 27

DEVELOP

CORBETT VIDEO: https://youtu.be/B3SsWXptla8

1.

You start at (0,0) and move 3 units right and 2 units up. What are the coordinates?

Step 1: Horizontal movement: move 3 units right $\rightarrow x = 0 + 3 = 3$

Step 2: Vertical movement: move 2 units up \rightarrow y = 0 + 2 = 2

Step 3: Combine coordinates \rightarrow (3,2)

2.

You start at (0,0) and move 5 units right and 0 units up. What are the coordinates?

- Step 1: Horizontal movement: move 5 units right $\rightarrow x = 0 + 5 = 5$
- Step 2: Vertical movement: no movement $\rightarrow y = 0$
- Step 3: Combine coordinates \rightarrow (5,0)

3.

You start at (4,3) and move 2 units right and 1 unit up. What are the new coordinates?

- Step 1: Original x = 4. Move $2 \text{ right} \rightarrow \text{new } x = 4 + 2 = 6$
- Step 2: Original y = 3. Move 1 up \rightarrow new y = 3 + 1 = 4
- Step 3: Combine coordinates \rightarrow (6,4)

4.

You start at (7,5) and move 3 units left and 2 units down. What are the new coordinates?

- Step 1: Original x = 7. Move $3 \text{ left} \rightarrow \text{new } x = 7 3 = 4$
- Step 2: Original y = 5. Move 2 down \rightarrow new y = 5 2 = 3
- Step 3: Combine coordinates \rightarrow (4,3)

5.

You start at (8,6). After moving 4 units left and 3 units down, what are the coordinates?

- Step 1: Original x = 8. Move $4 \text{ left} \rightarrow \text{new } x = 8 4 = 4$
- Step 2: Original y = 6. Move 3 down \rightarrow new y = 6 3 = 3
- Step 3: Combine coordinates \rightarrow (4,3)
- 6. Start at (0,0). Move 4 units right and 7 units up. What are the coordinates?
- 8. Start at (5,2). Move 3 units right and 4 units up. What are the new coordinates?
- 7. Start at (0,0). Move 6 units right and 3 units up. What are the coordinates?
- 9. Start at (9,7). Move 2 units left and 1 unit down. What are the new coordinates?

- 10. Start at (3,8). Move 1 unit left and 5 units down. What are the new coordinates?
- 11. Start at (10,10). Move 4
 units left and 3 units down.
 What are the new
 coordinates?
- 12. What are the coordinates 2 units above (5,5)?
- 13. What are the coordinates 3 units to the left of (8,4)?
- 14. What are the coordinates 1 unit below (7,9)?
- 15. What are the coordinates 4 units to the right of (2,3)?

APPLY



A1.

Sam starts at the park entrance (0,0). He walks 5 metres east and 3 metres north to a bench. What are the bench's coordinates?

A2.

A drone takes off from (2,4). It flies 7 units east and 2 units north to take photos. What are its new coordinates?

A3.

A treasure is buried 3 units west and 4 units south of a tree at (10,8). What are the treasure's coordinates?

A4.

In a city grid, the cafe is at (6,9). The bookshop is 2 blocks west and 1 block south of the cafe. What are the bookshop's coordinates?

A5.

A boat sails from harbour (15,10). It travels 6 units west and 5 units south to an island. What are the island's coordinates?