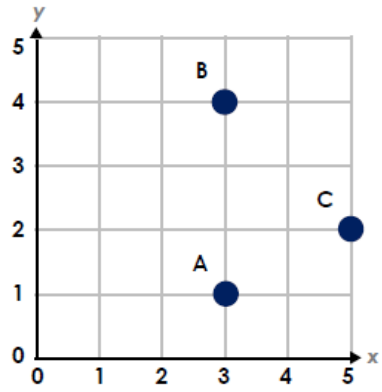
## Move on a Grid

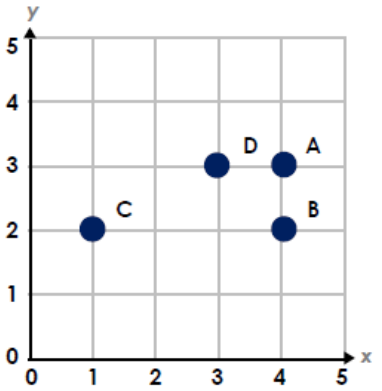
1a. Move point A to create the vertices for a right-angled triangle. Record the new coordinates.




PS

## Move on a Grid

1b. Move point C to create the vertices for a square. Record the new coordinates.




PS

2a. A point was placed on the following coordinates:

(2, 5)

The point was then moved 2 squares.

What could the new coordinates be? Find 2 possibilities.

PS

2b. A point is placed on the following coordinates:

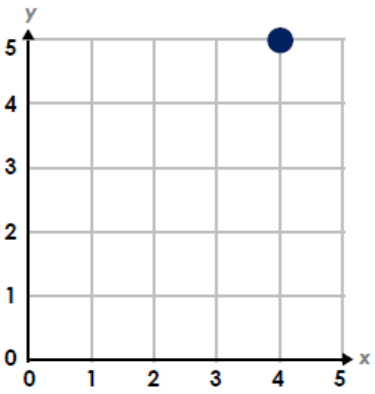
(5, 4)

The point was moved 4 squares.

What could the new coordinates be? Find 2 possibilities.

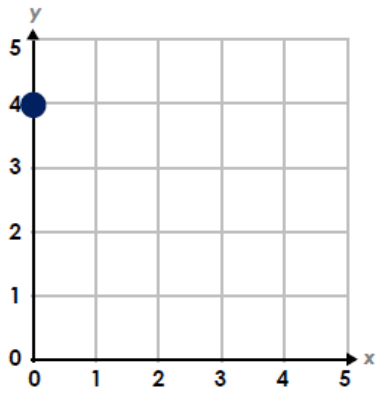
PS

3a. The point was moved 5 up. Ahmed thinks the original coordinates were (4, 0). Is he correct? Prove it.




R

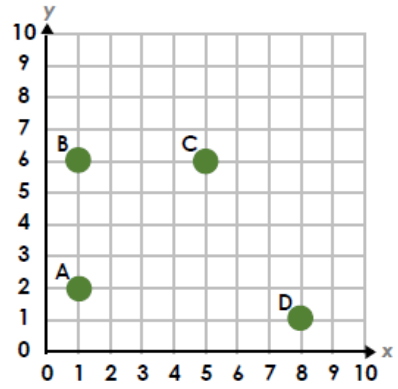
3b. The point was moved 3 left. Sophia thinks the original coordinates were (4, 4). Is she correct? Prove it.




R

## Move on a Grid

4a. Move one point to create the vertices for a square. Record the new coordinates.




PS

5a. Points are placed on the following coordinates:

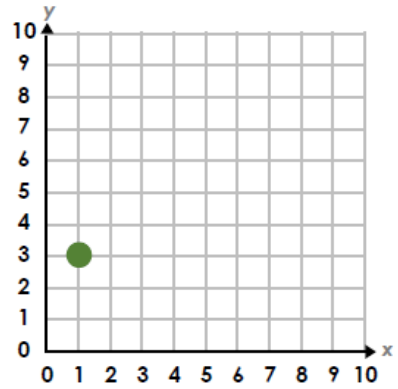
(7, 5) (4, 7) (1, 4)

Each of the points have been moved 1 square in one direction and 3 squares in another.

What could the new coordinates be? Find 2 possibilities.

PS

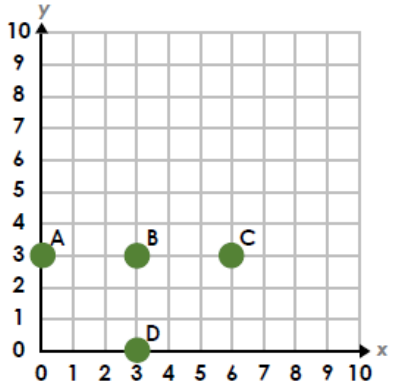
6a. The point was moved 3 left and 2 up. Ben thinks the original coordinates were (4, 1). Is he correct? Prove it.




R

## Move on a Grid

4b. Move one point to create the vertices for a square. Record the new coordinates.




PS

5b. Points are placed on the following coordinates:

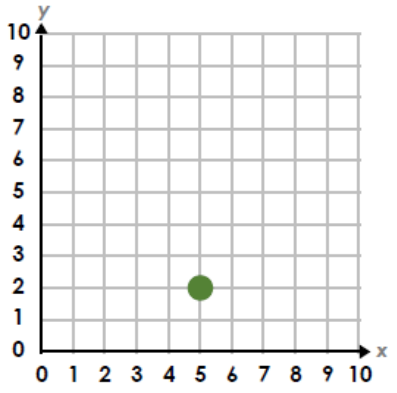
(5, 8) (7, 4) (6, 7)

Each of the points have been moved 2 square in one direction and 2 squares in another.

What could the new coordinates be? Find 2 possibilities.

PS

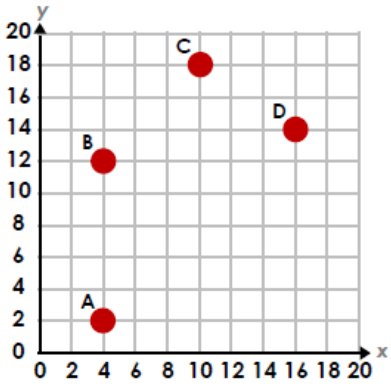
6b. The point was moved 5 right and 1 up. Eve thinks the original coordinates were (1, 1). Is she correct? Prove it.




R

## Move on a Grid

7a. Move two points to create the vertices for a square. Record the new coordinates. Find two possibilities.




PS

8a. Points are placed on the following coordinates:

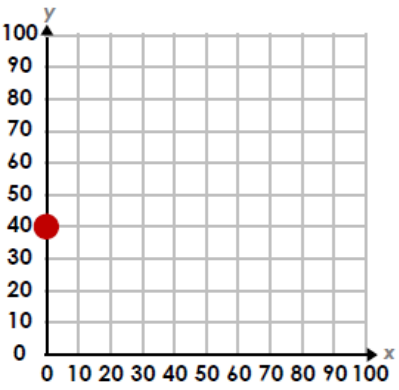
(6, 8) (8, 16) (10, 10) (14, 12)

Each of the points have been moved 6 in one direction and 8 in another.

What could the new coordinates be? Find 2 possibilities.

PS

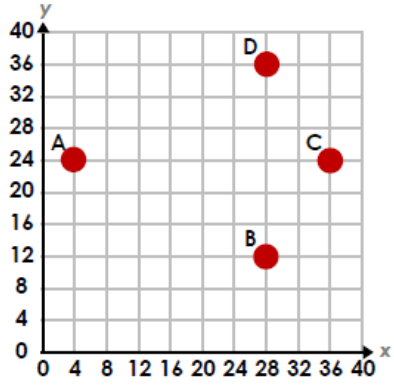
9a. The point was moved 40 left and 20 down. The original coordinates of the point were (40, 60). Is this correct? Prove it.




R

## Move on a Grid

7b. Move two points to create the vertices for a rectangle. Record the new coordinates. Find two possibilities.




PS

8b. Points are placed on the following coordinates:

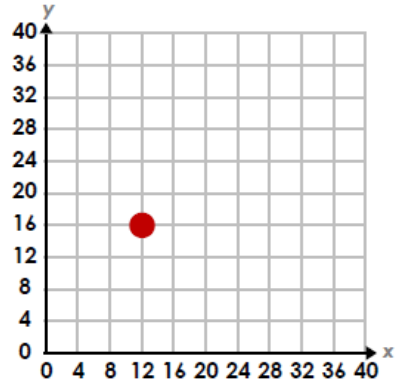
(40, 65) (60, 30) (50, 55) (70, 70)

Each of the points have been moved 20 in one direction and 30 in another.

What could the new coordinates be? Find 2 possibilities.

PS

9b. The point was moved 2 right and 4 up. The original coordinates of the point were (4, 0). Is this correct? Prove it.

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## Reasoning and Problem Solving
## Move on a Grid

**Developing**

1a. (3, 2) or (3, 0)

2a. (0, 5), (2, 3) or (4, 5)

3a. Ahmed is correct. The new coordinates are (4, 5) which is 5 up from (4, 0).

**Expected**

4a. D = (5, 2)

5a. Various answers, for example: (6, 2), (3, 4), (0, 1) or (8, 8), (5, 10), (2, 7)

6a. Ben is correct. The new coordinates are (4, 5) which is 5 up from (4, 0).

**Greater Depth**

7a. Various answers, for example:
C = (14, 2) and D = (14, 12) or
A = (10, 6) and D = (16, 12)

8a. Various answers, for example:
(0, 0), (2, 8), (4, 2), (8, 4) or (12, 0), (14, 8), (16, 2), (20, 4)

9a. Correct. The new coordinates are (0, 40) which is 40 left 20 down from (40, 60).

## Reasoning and Problem Solving
## Move on a Grid

**Developing**

1b. (3, 2)

2b. (1, 4) or (5, 0)

3b. Sophia is incorrect. The original coordinates were (3, 4) which is 3 left frc (0, 4).

**Expected**

4b. C = (0, 0) or A = (6, 0)

5b. Various answers, for example: (3, 6), (5, 2), (4, 5) or (7, 10), (9, 6), (8, 9)

6b. Eve is incorrect. The original coordinates were (0, 1) which is 5 right and 1 up from (5, 2).

**Greater Depth**

7b. Various answers, for example:
B = (4, 12) and D = (36, 12) or
A = (8, 36) and C = (8, 12)

8b. Various answers, for example:
(20, 35), (40, 0), (30, 25), (50, 40) or (60, 95), (80, 60), (70, 85), (90, 100)

9b. Incorrect. The original coordinates were (10, 12) which is 2 right and 4 up from (12, 16).