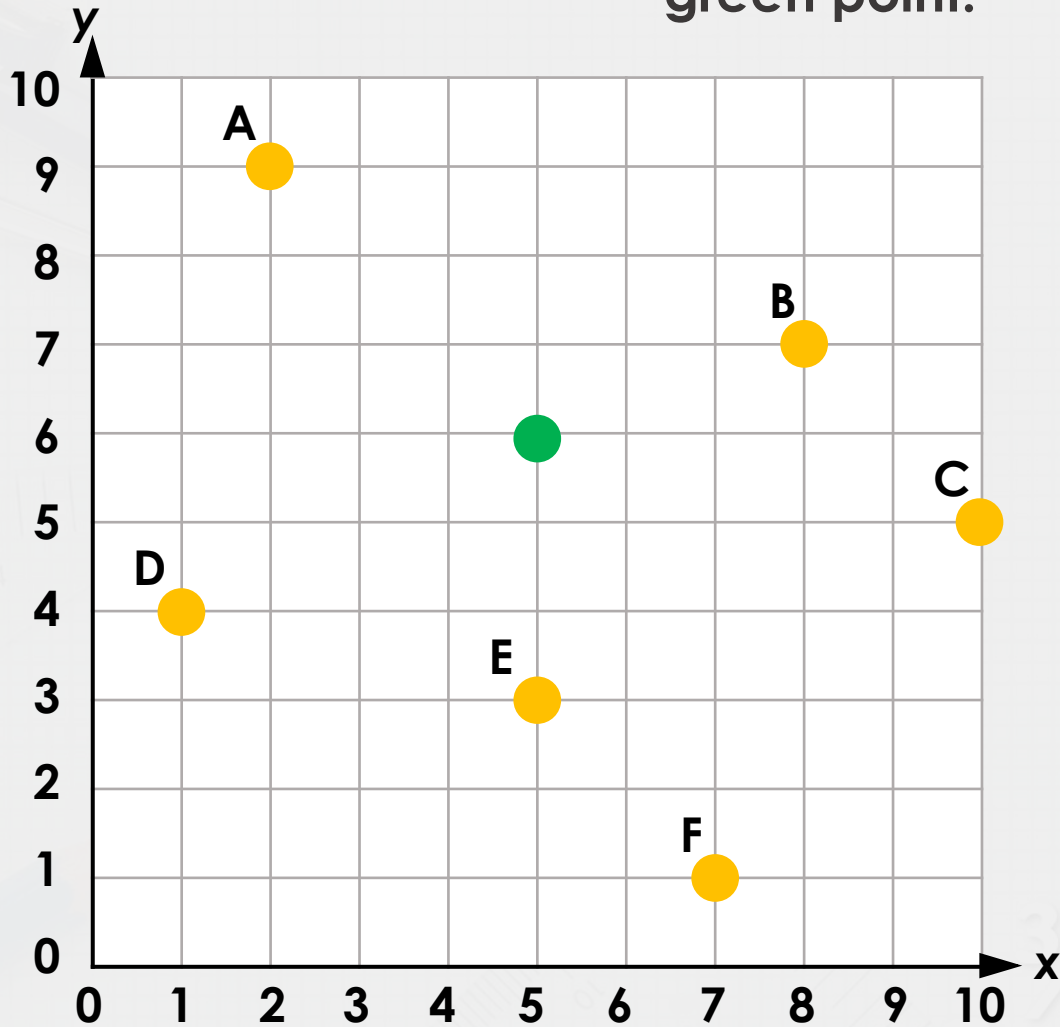


# Step 4: Describe Movement

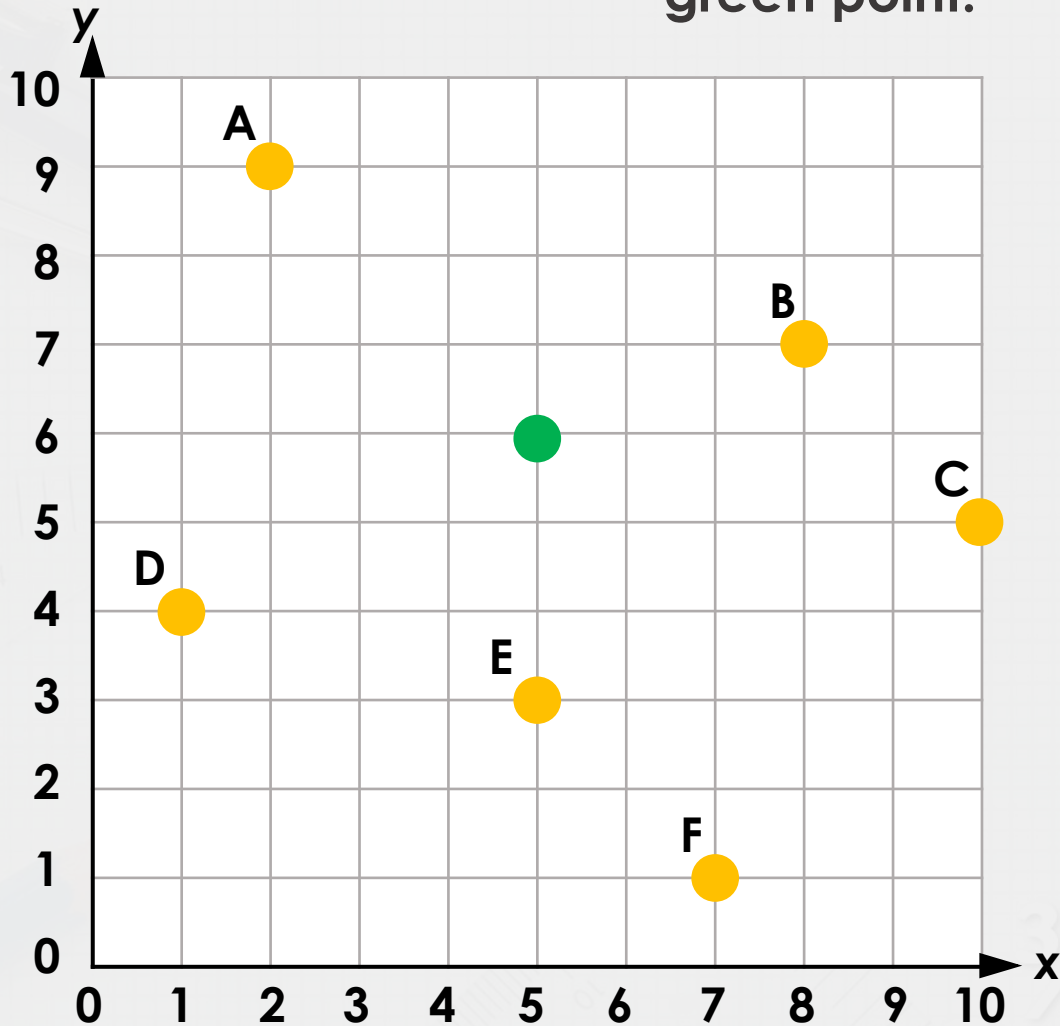
## Introduction

Describe how each of the orange points must move to get to the green point.



## Introduction

Describe how each of the orange points must move to get to the green point.



**A: 3 right and 3 down**

**B: 3 left and 1 down**

**C: 5 left and 1 up**

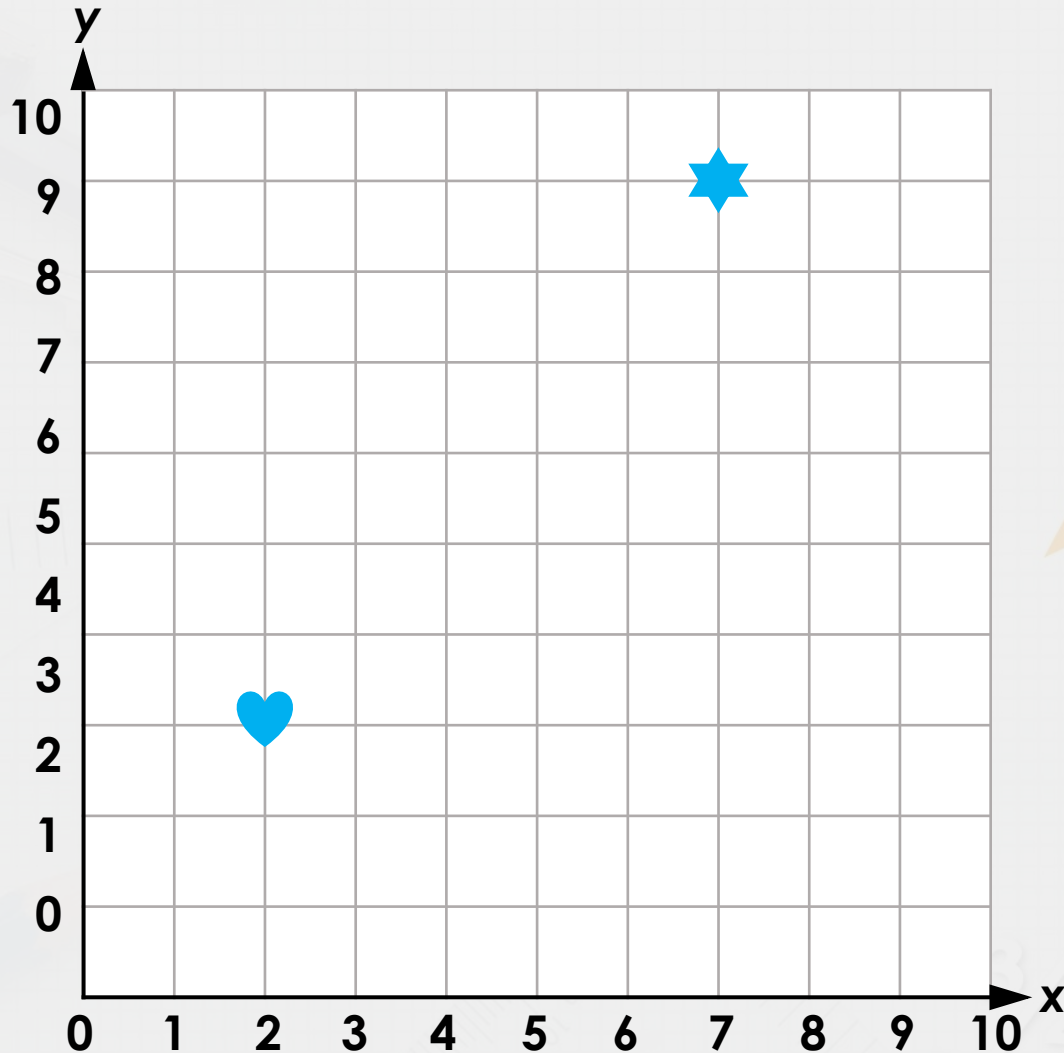
**D: 4 right and 2 up**

**E: 3 up**

**F: 2 left and 5 up**

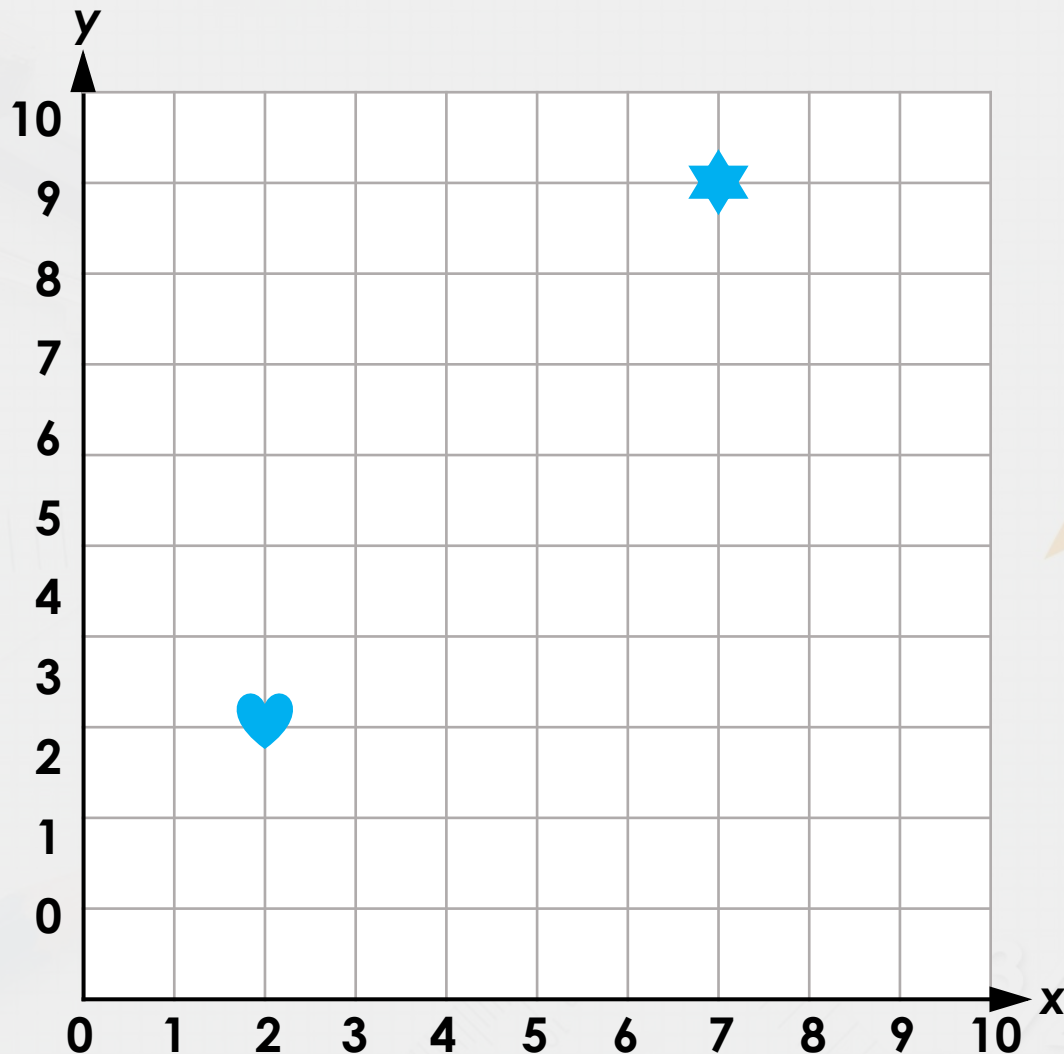
## Varied Fluency 1

**Describe the movement needed for the heart to get to the star.**



## Varied Fluency 1

Describe the movement needed for the heart to get to the star.

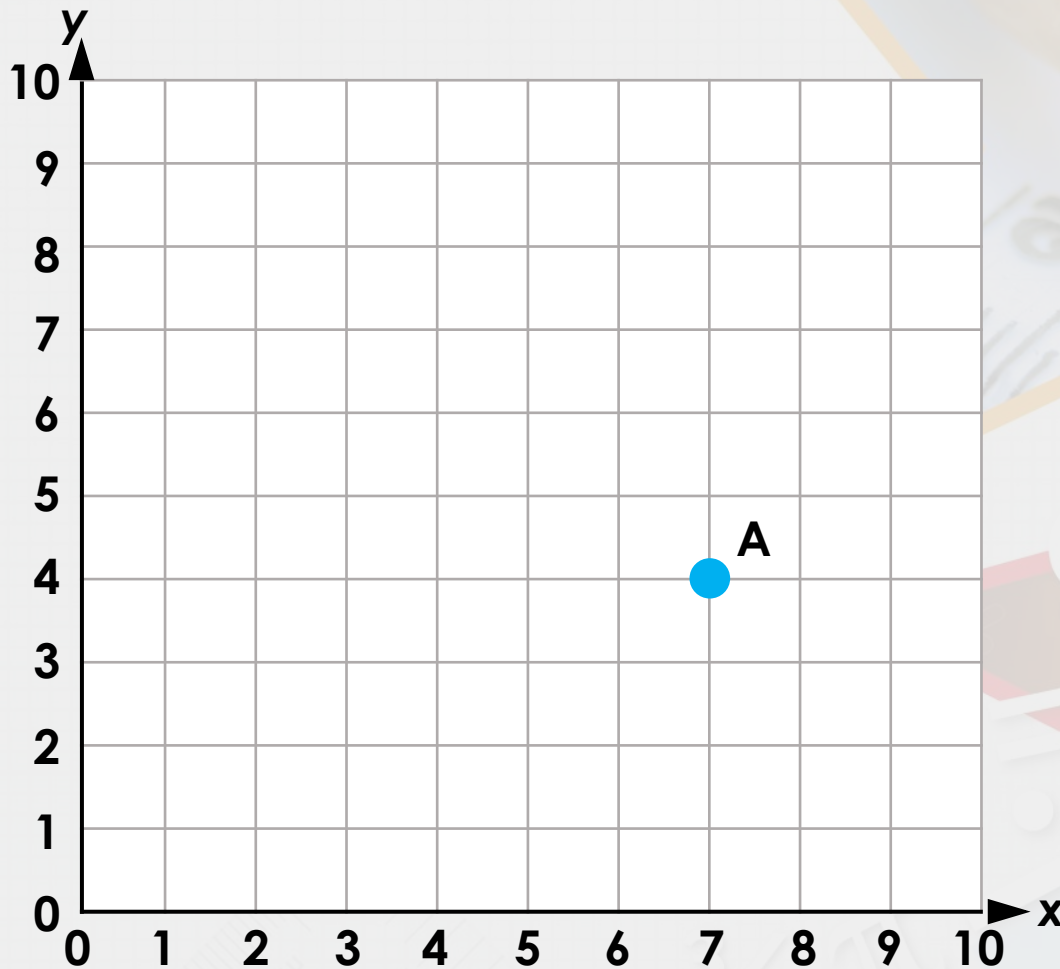


**5 squares right  
and 6 squares  
up.**



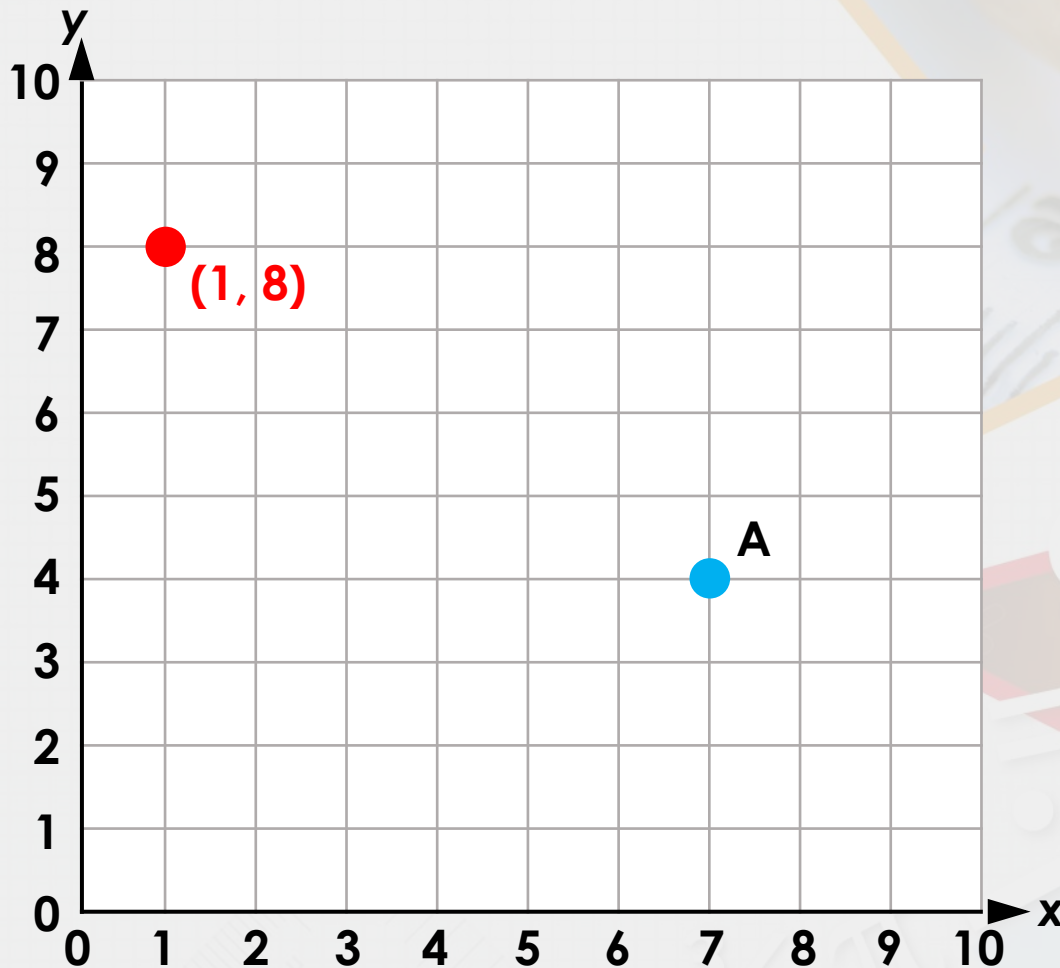
## Varied Fluency 2

**Translate point A 6 left and 4 up. What are the new coordinates?**



## Varied Fluency 2

Translate point A 6 left and 4 up. What are the new coordinates?



### Varied Fluency 3

**A point is plotted on a grid at  $(5, 8)$ .**

**It is translated 3 left and 4 down.**

**What are the new coordinates?**



### Varied Fluency 3

A point is plotted on a grid at  $(5, 8)$ .

It is translated 3 left and 4 down.

What are the new coordinates?

**$(2, 4)$**

### Varied Fluency 4

**Rebecca has plotted a point on a grid at  $(2, 5)$ .**

**It is translated to  $(9, 7)$ .**

**How is it translated?**

### Varied Fluency 4

Rebecca has plotted a point on a grid at  $(2, 5)$ .

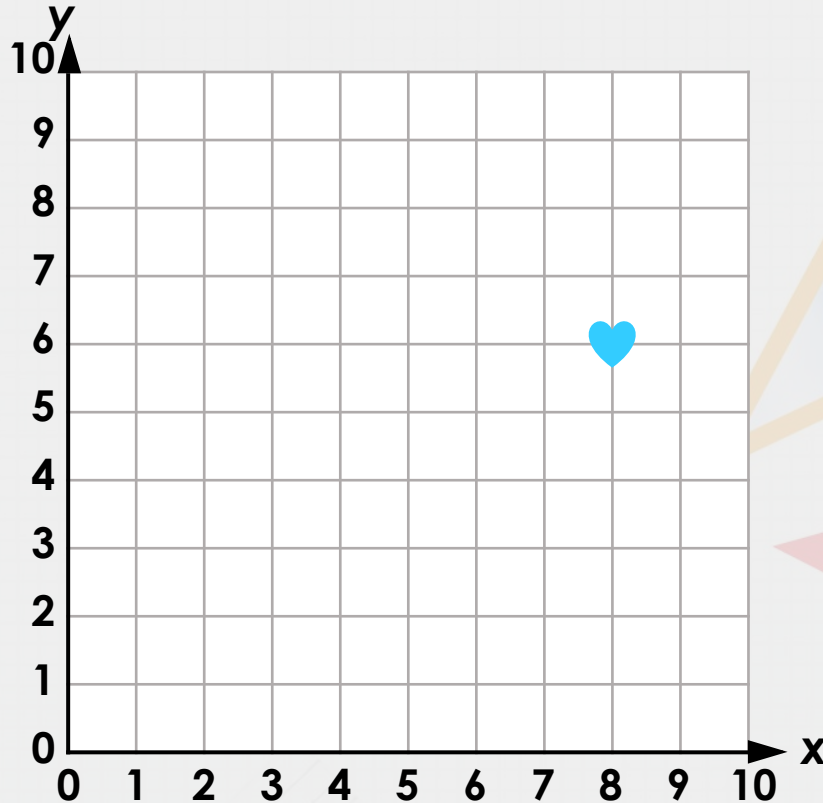
It is translated to  $(9, 7)$ .

How is it translated?

**7 right and 2 up**

### Reasoning 1

The heart has been translated. Its starting coordinates were (3, 9). Kate says it has moved 3 right and 4 down.

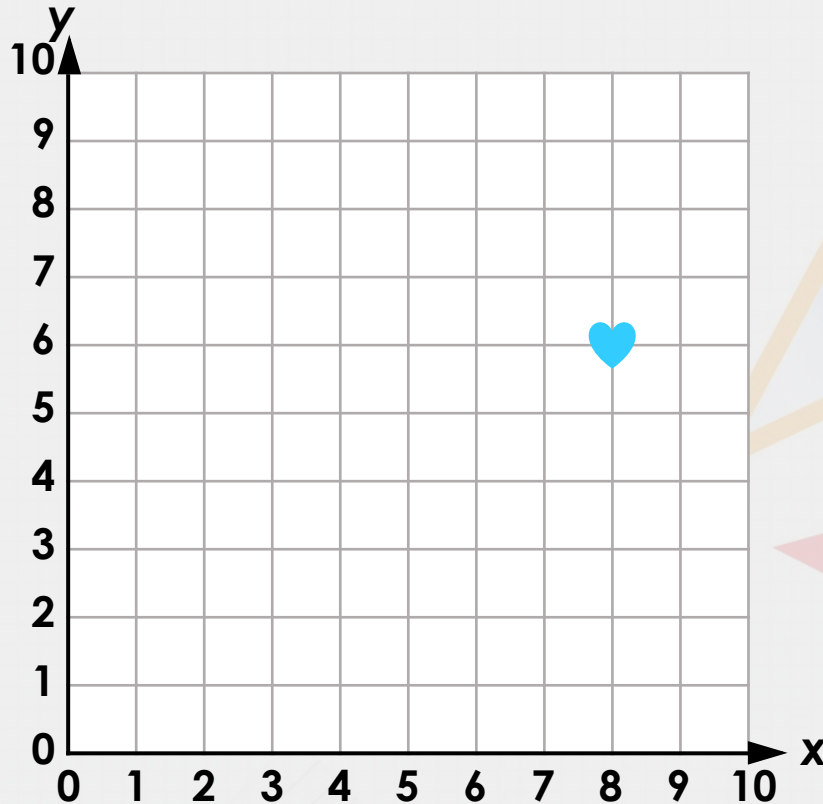


Is she correct? Explain.



### Reasoning 1

The heart has been translated. Its starting coordinates were (3, 9). Kate says it has moved 3 right and 4 down.

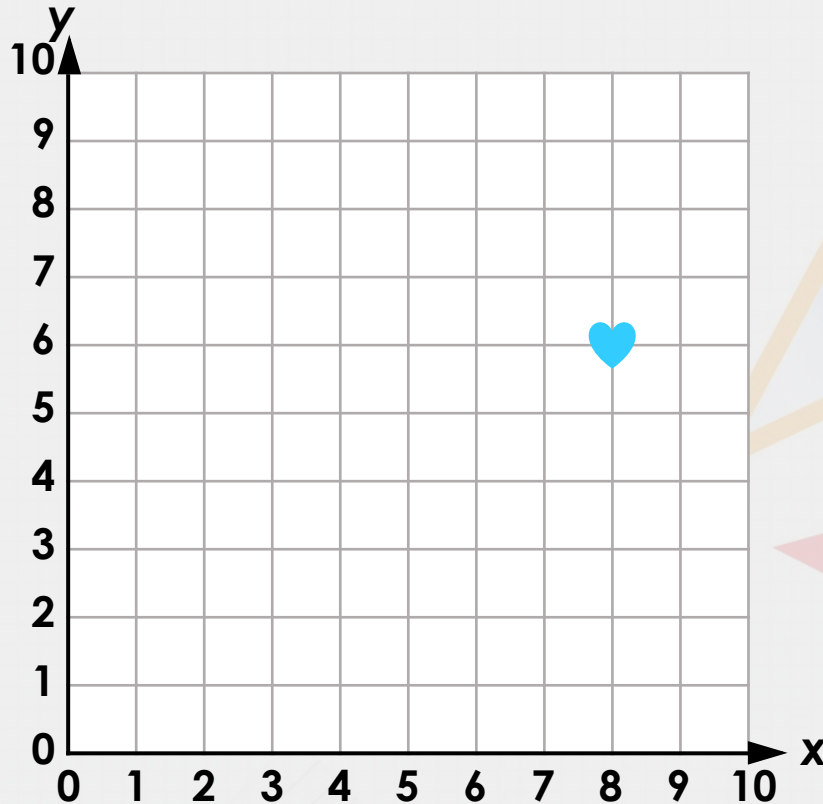


Is she correct? Explain.  
Kate is incorrect because...



### Reasoning 1

The heart has been translated. Its starting coordinates were (3, 9). Kate says it has moved 3 right and 4 down.

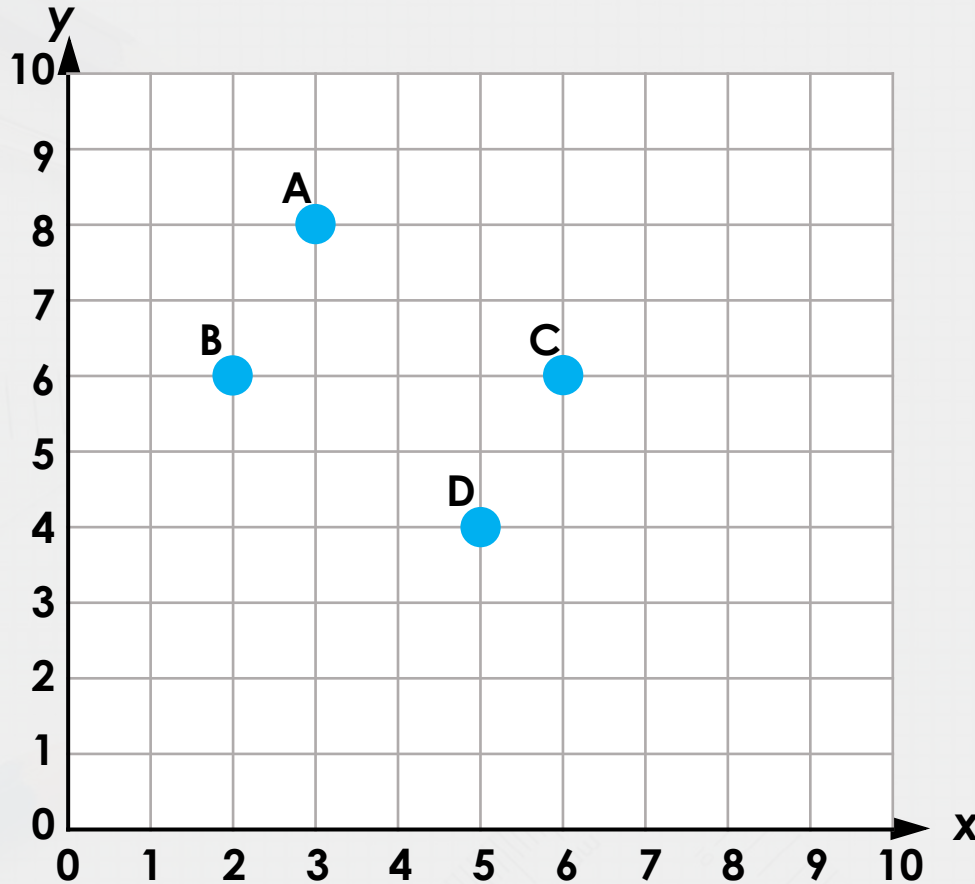


Is she correct? Explain.

**Kate is incorrect because the heart has moved 5 right and 3 down.**

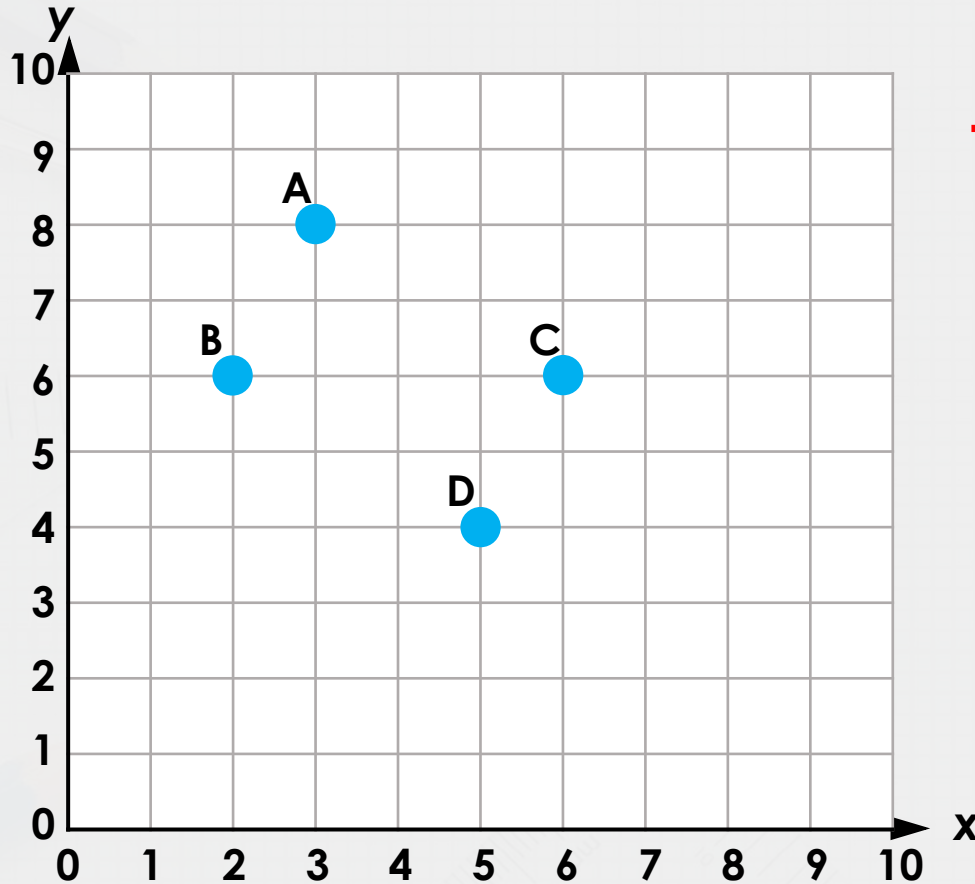
### Problem Solving 1

Points A and B make exactly the same translations. Write the translations made and the coordinates of the start and finish positions of each point.



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Points A and B make exactly the same translations. Write the translations made and the coordinates of the start and finish positions of each point.



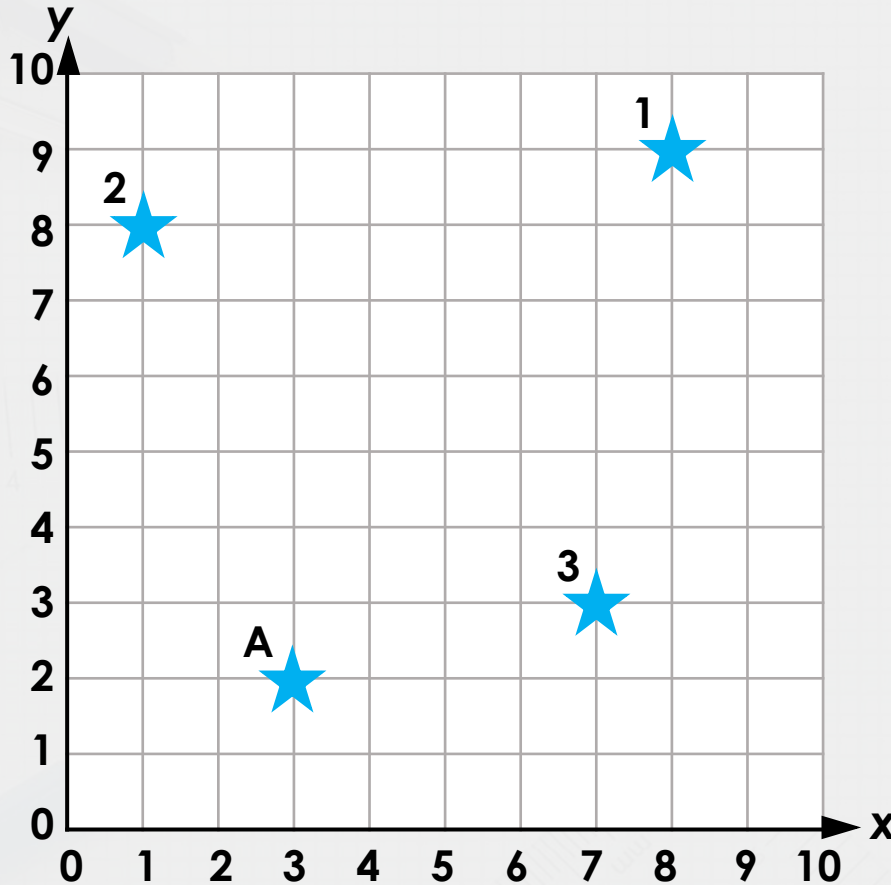
**They have both moved 3 squares right and 2 squares down.**

**A (3, 8) has moved to C (6, 6).**

**B (2, 6) has moved to D (5, 4).**

## Problem Solving 2

Star A has been translated three times. Match each numbered point to the correct translation statement.



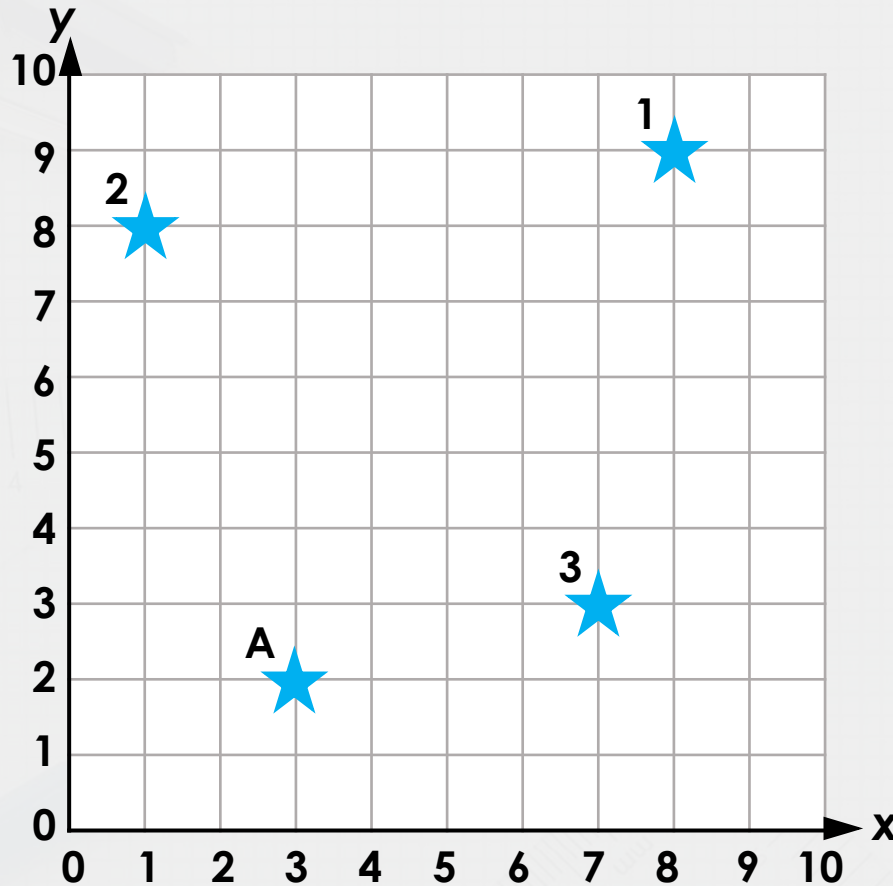
**A. 2 left and 6 up**

**B. 4 right and 1 up**

**C. 5 right and 7 up**

## Problem Solving 2

Star A has been translated three times. Match each numbered point to the correct translation statement.



**2A. 2 left and 6 up**

**3B. 4 right and 1 up**

**1C. 5 right and 7 up**