

LIFE/work balance

# CLASSROOM *Secrets*

## #LIFEworkbalance

We have started a #LIFEworkbalance campaign and we need your help to complete our LIFE/work balance survey.

We hope to publish the results soon, so please give 15 minutes of your time to help us get a true picture of school life.

Want to be a part of this campaign? Take the [survey](#) on our website and share it with your colleagues!

## Year 4 – Summer Block 6 – Position and Direction – Describe Position

### About This Resource:

This PowerPoint has been designed to support your teaching of this small step. It includes a starter activity and an example of each question from the Varied Fluency and Reasoning and Problem Solving resources also provided in this pack. You can choose to work through all examples provided or a selection of them depending on the needs of your class.

### National Curriculum Objectives:

Mathematics Year 4: (4P3a) [Describe positions on a 2-D grid as coordinates in the first quadrant.](#)

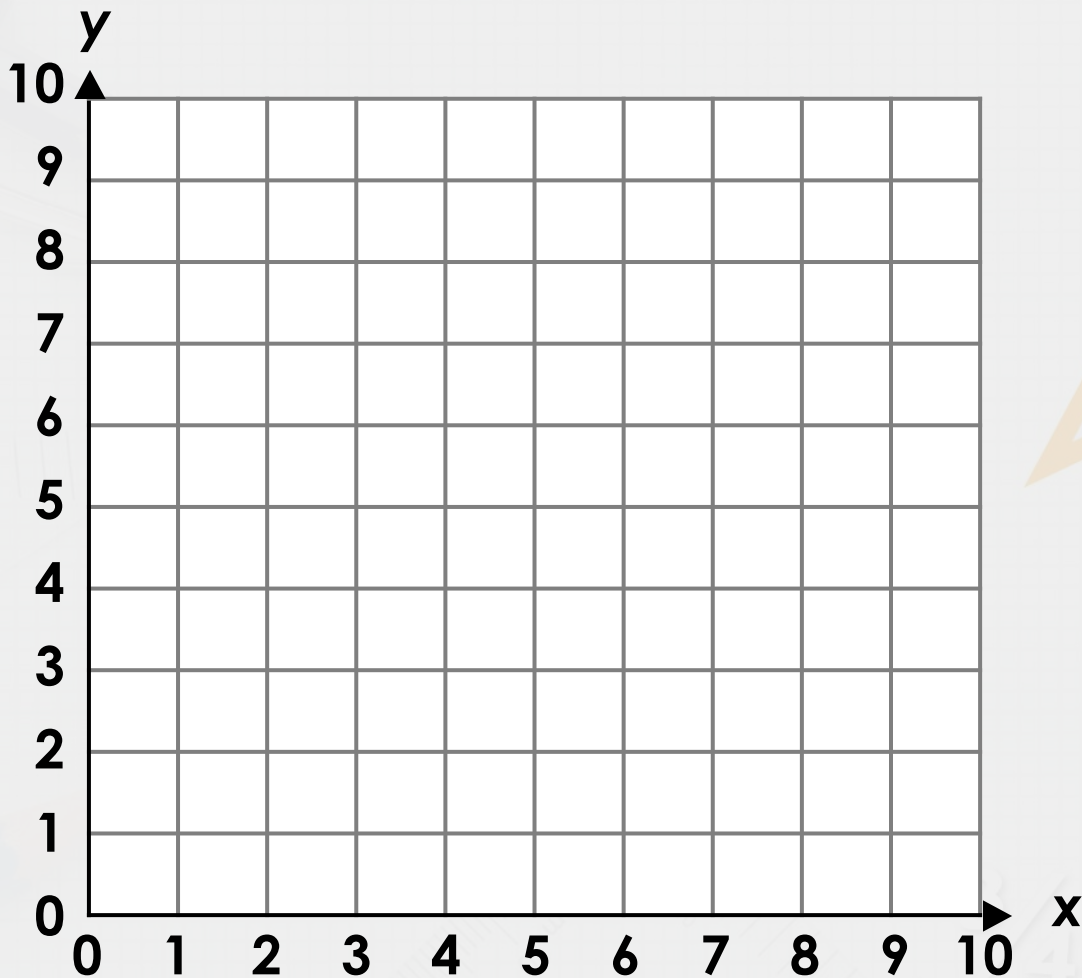
More [Year 4 Position and Direction](#) resources.

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

# Step 1: Describe Position

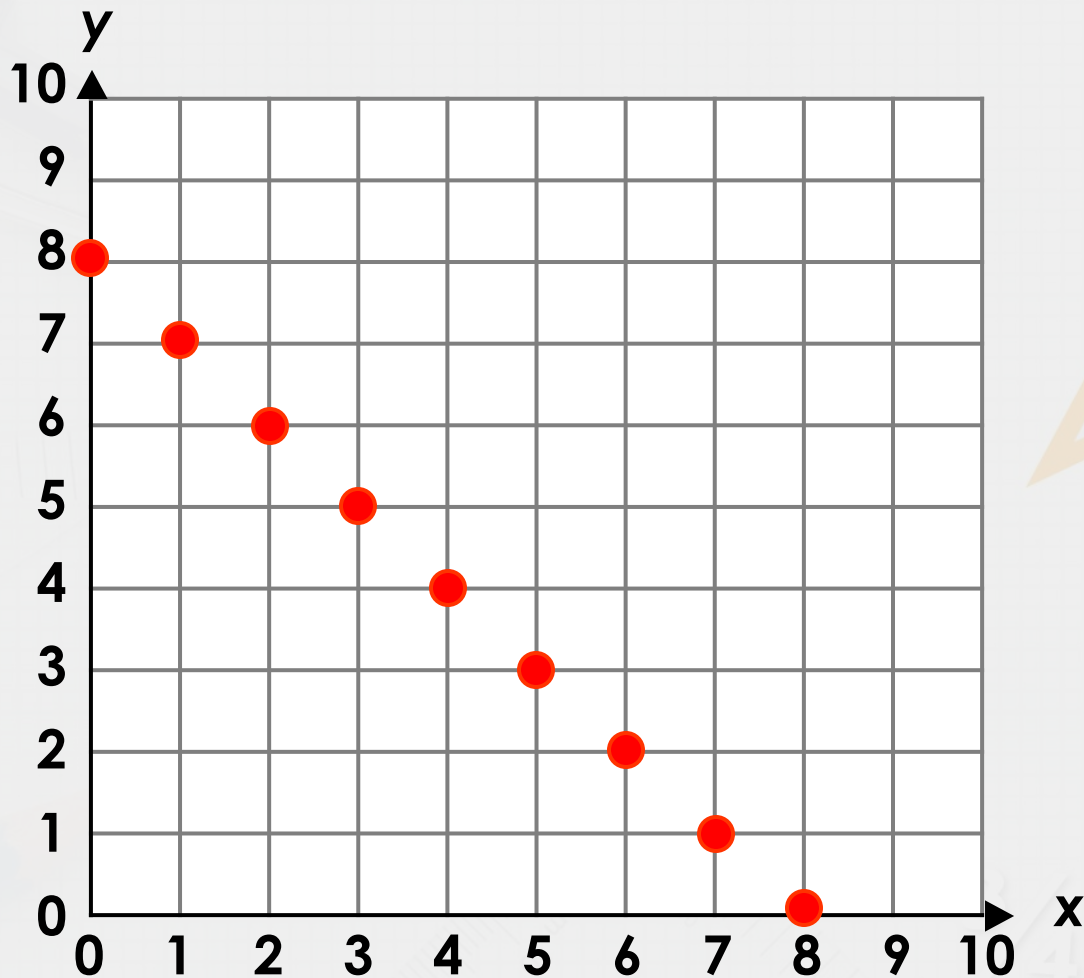
## Introduction

The digits in a pair of coordinates add to make 8. What could the coordinates be? Plot them and record them.



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(0, 8)

(1, 7)

(2, 6)

(3, 5)

(4, 4)

(5, 3)

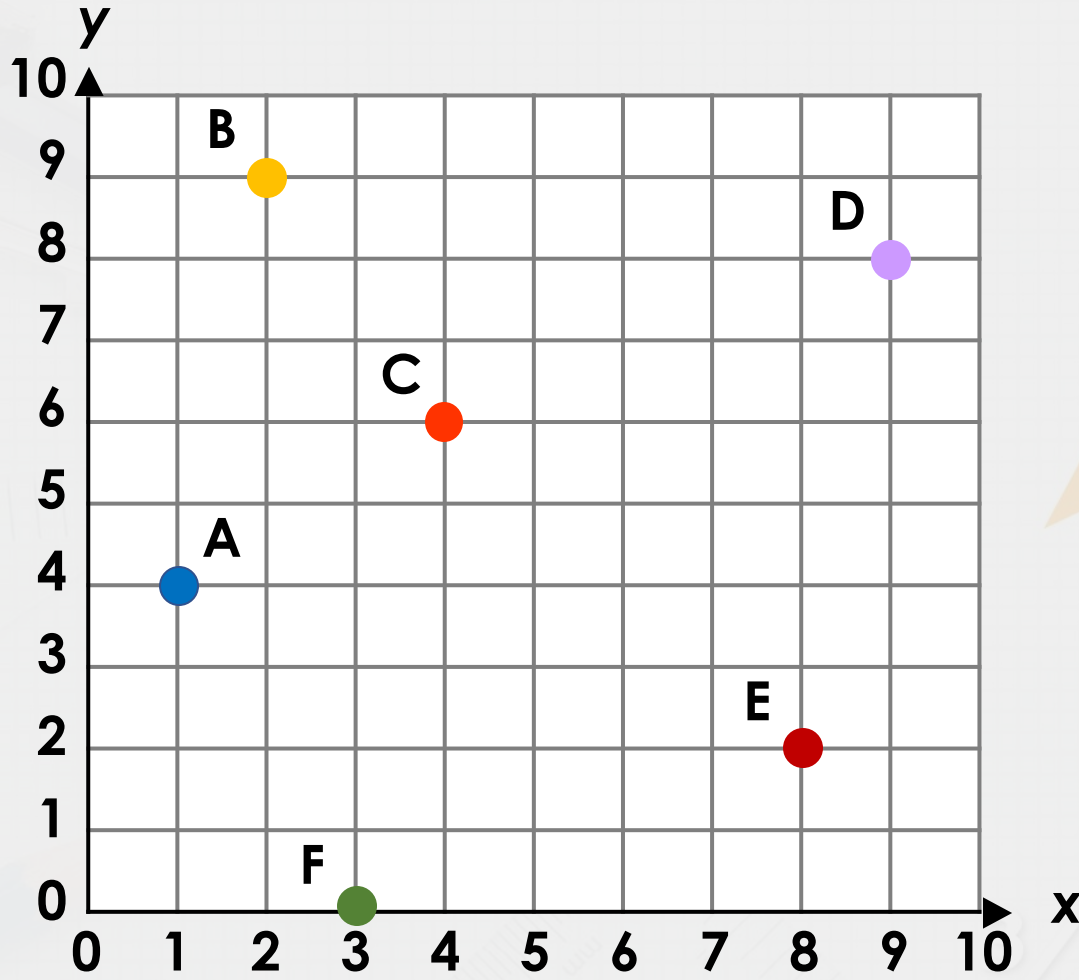
(6, 2)

(7, 1)

(8, 0)

## Varied Fluency 1

Are the coordinates of each point correct?



$$A = (1, 4)$$

$$B = (9, 2)$$

$$C = (4, 6)$$

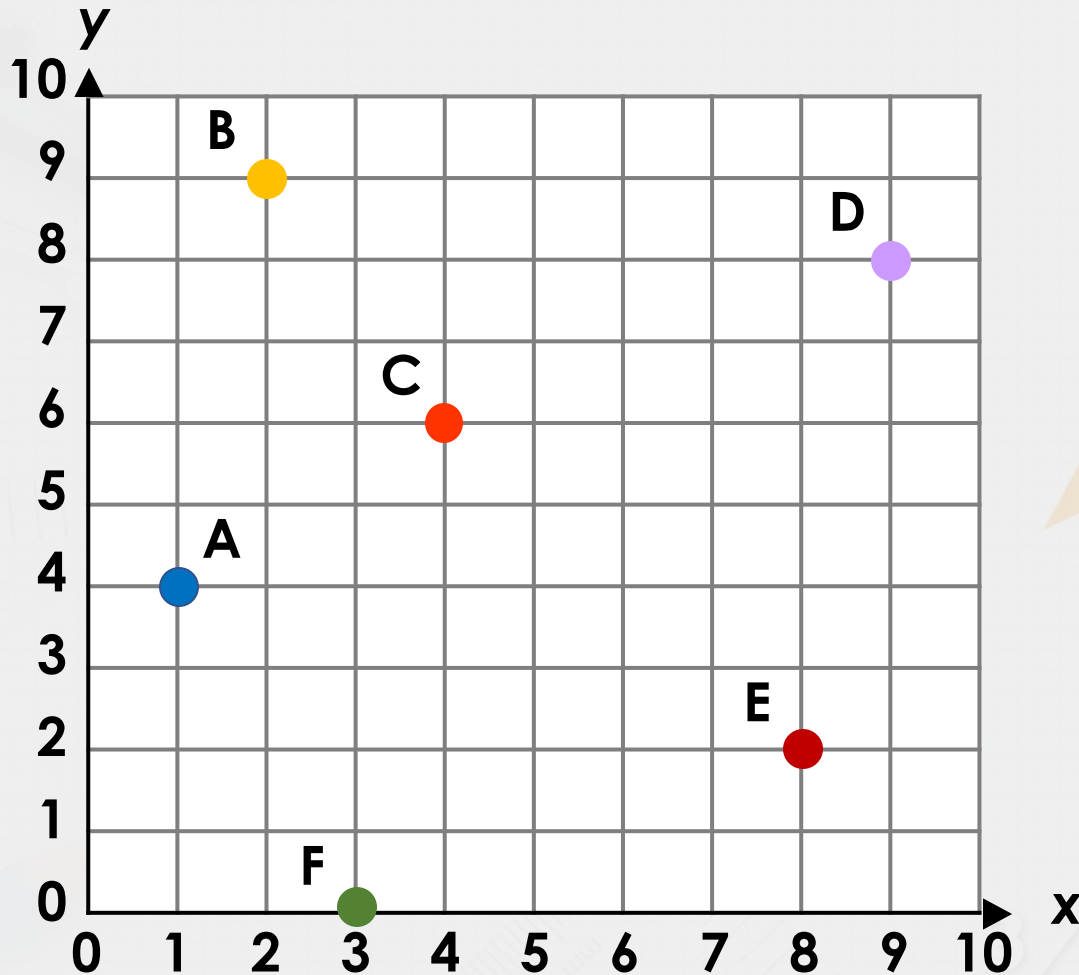
$$D = (8, 9)$$

$$E = (8, 2)$$

$$F = (3, 1)$$

## Varied Fluency 1

Are the coordinates of each point correct?



$A = (1, 4)$  ✓

$B = (9, 2)$  ✗  $(2, 9)$

$C = (4, 6)$  ✓

$D = (8, 9)$  ✗  $(9, 8)$

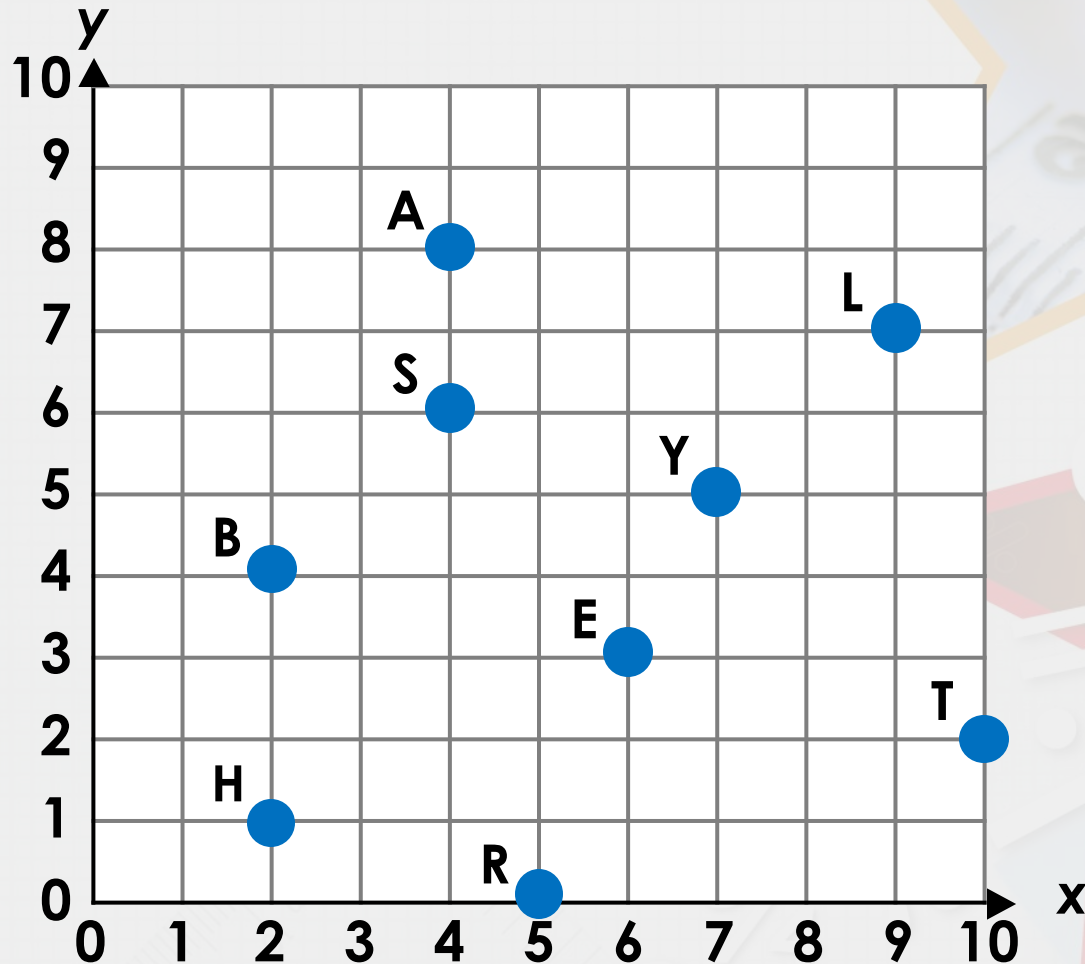
$E = (8, 2)$  ✓

$F = (3, 1)$  ✗  $(3, 0)$

## Varied Fluency 2

Find these coordinates in order. What word do the letters spell?

(6, 3) (4, 8) (5, 0) (9, 7) (7, 5)



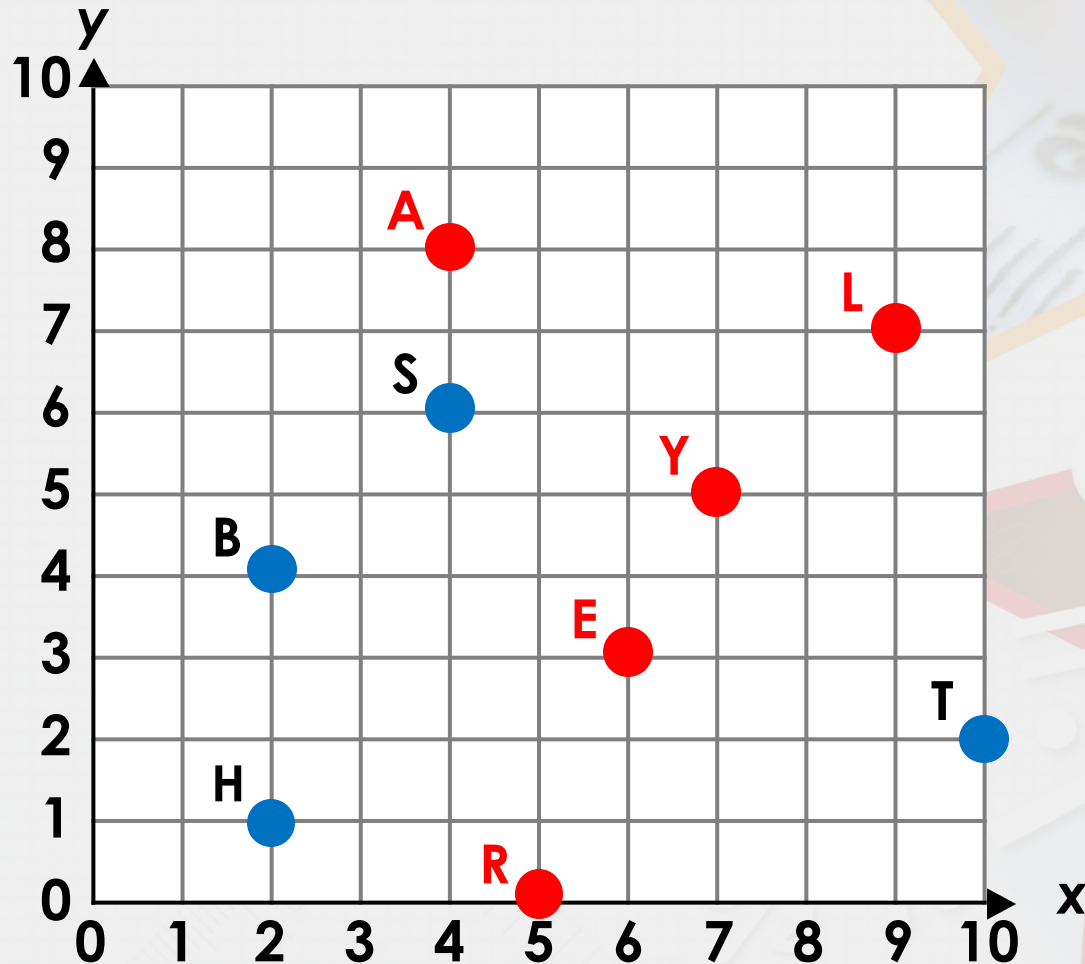


## Varied Fluency 2

Find these coordinates in order. What word do the letters spell?

(6, 3) (4, 8) (5, 0) (9, 7) (7, 5)

These  
coordinates  
spell EARLY.



### Varied Fluency 3

Complete the coordinates below and plot any missing points on the grid.

A = (5, 3)

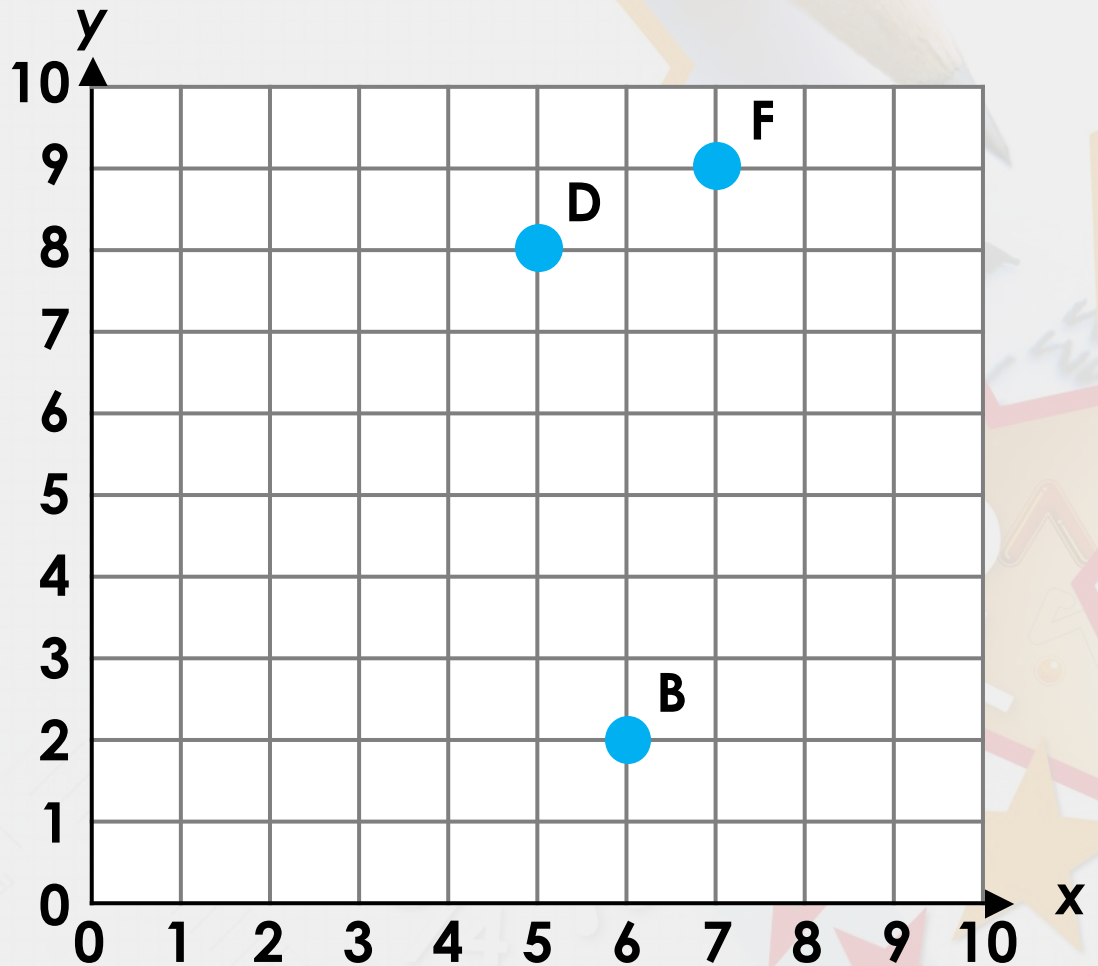
B = ( , )

C = (1, 7)

D = ( , )

E = (4, 6)

F = ( , )



### Varied Fluency 3

Complete the coordinates below and plot any missing points on the grid.

$$A = (5, 3)$$

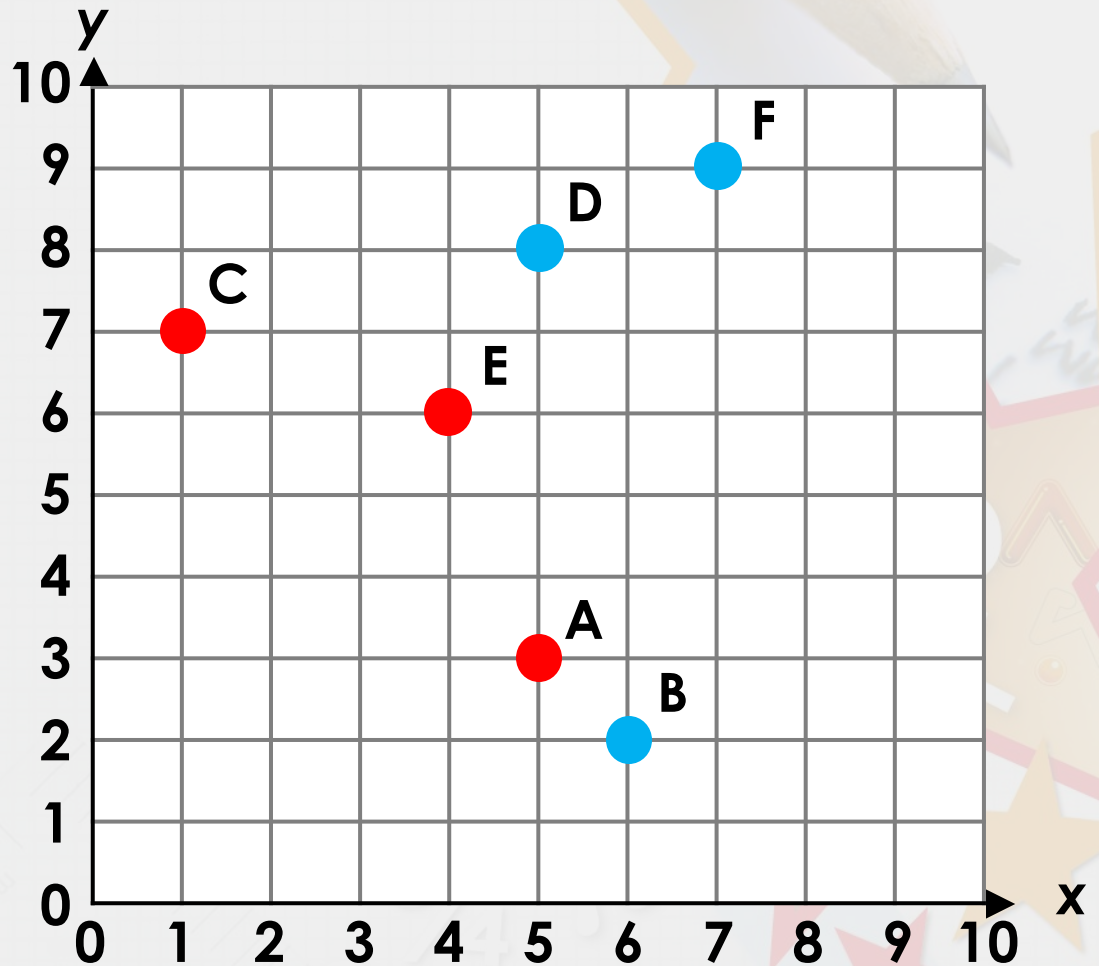
$$B = (6, 2)$$

$$C = (1, 7)$$

$$D = (5, 8)$$

$$E = (4, 6)$$

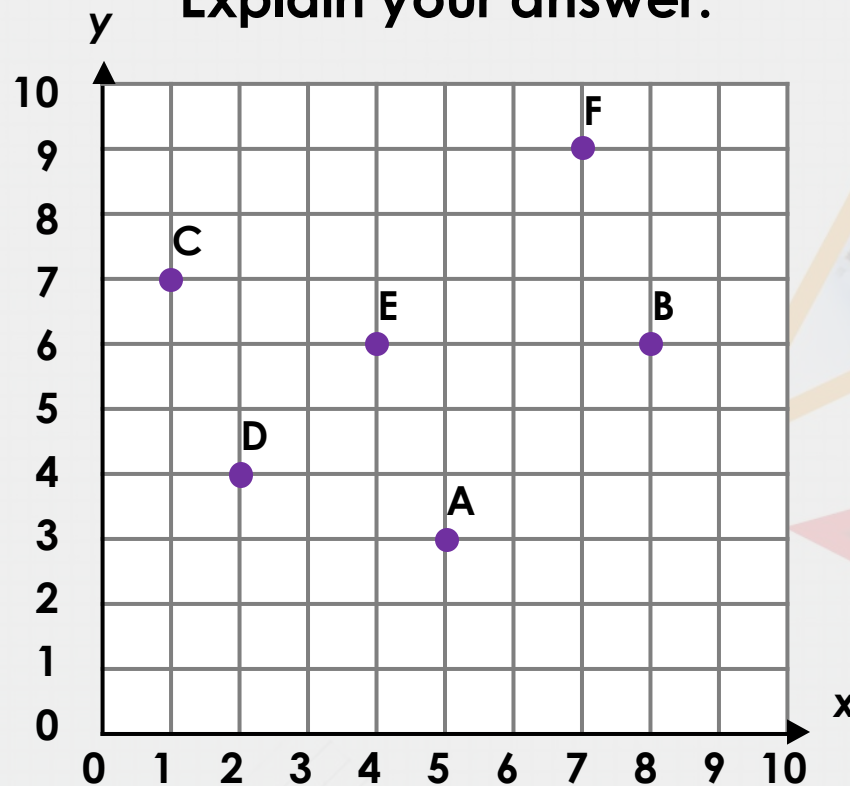
$$F = (7, 9)$$



## Reasoning 1

I'm thinking of a coordinate. The value of  $x$  is between 3 and 6 and the value of  $y$  is between 2 and 5. Which coordinate could it be?

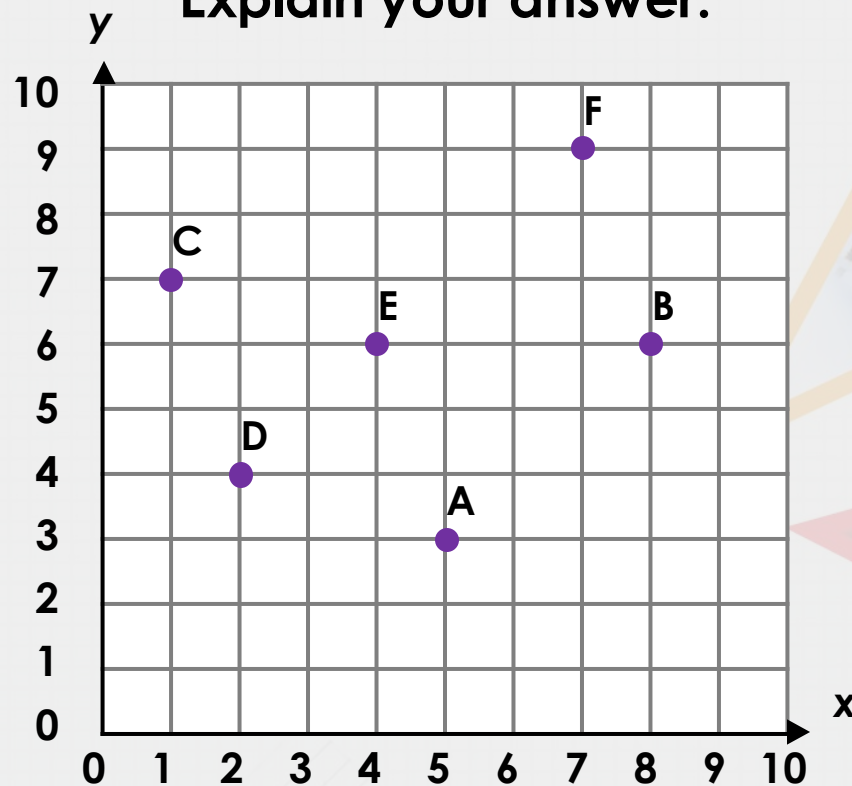
Explain your answer.



## Reasoning 1

I'm thinking of a coordinate. The value of  $x$  is between 3 and 6 and the value of  $y$  is between 2 and 5. Which coordinate could it be?

Explain your answer.

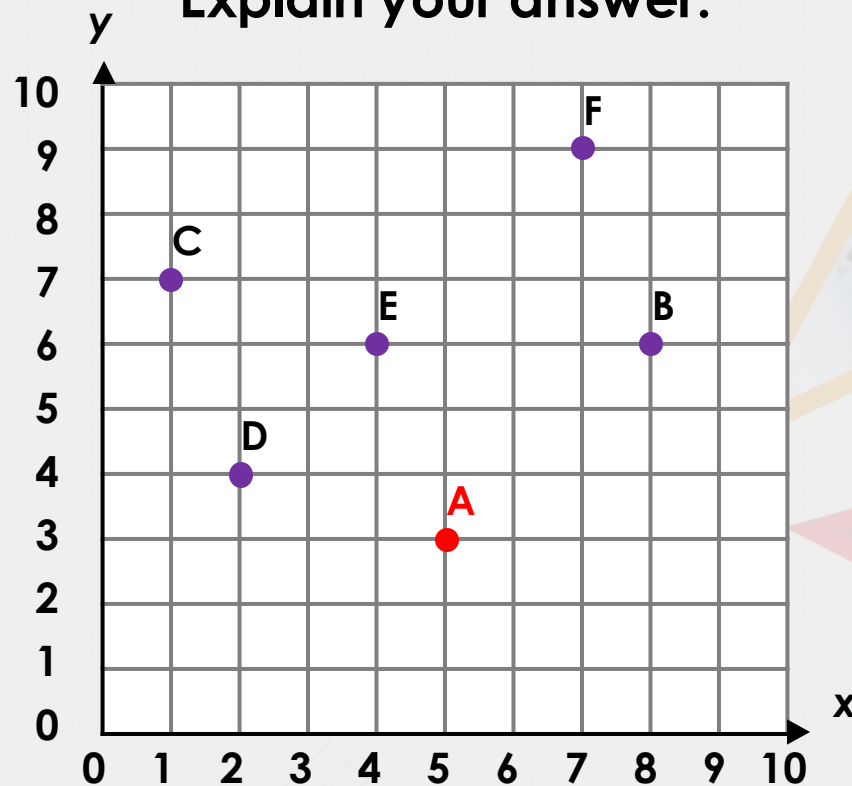


Coordinate A because...

## Reasoning 1

I'm thinking of a coordinate. The value of  $x$  is between 3 and 6 and the value of  $y$  is between 2 and 5. Which coordinate could it be?

Explain your answer.



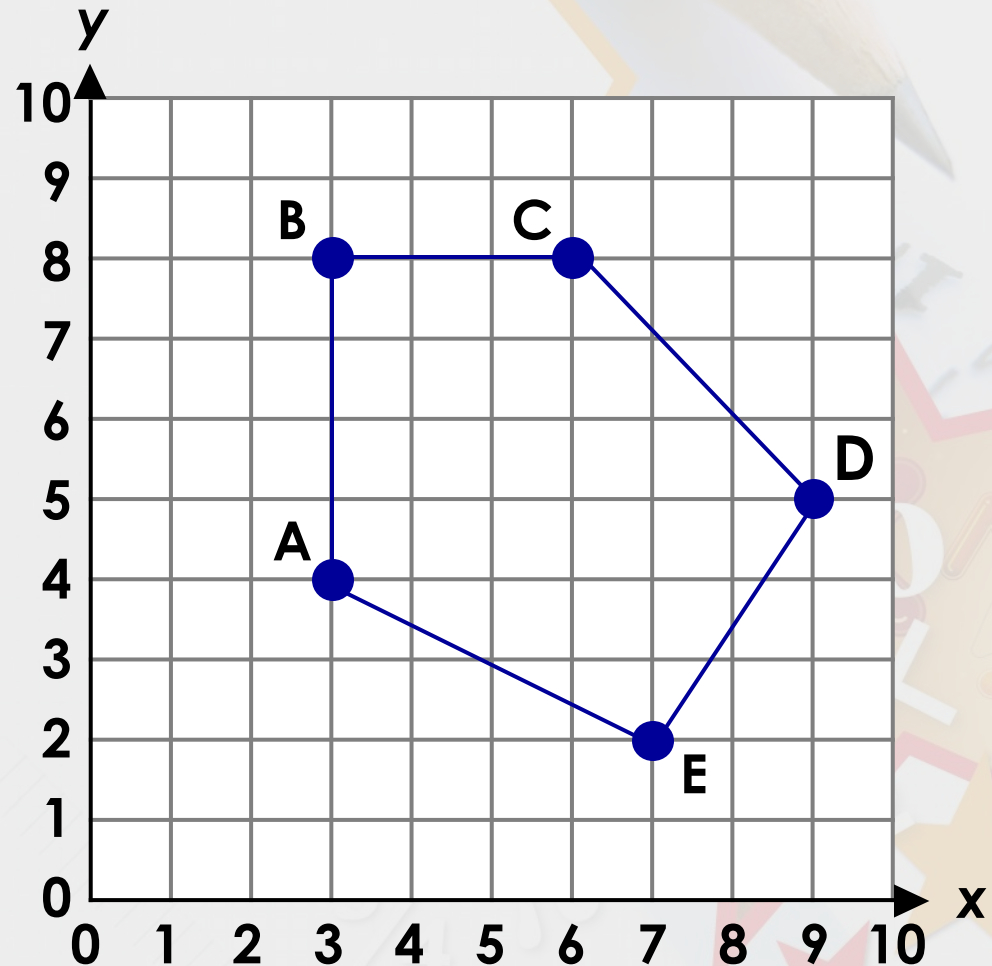
**Coordinate A because it is the only point with an  $x$  coordinate between 3 and 6 and a  $y$  coordinate between 2 and 5.**

## Problem Solving 1

Billy has written the coordinates for a pentagon. Correct any mistakes he has made.



Point A = (4, 3)  
Point B = (3, 8)  
Point C = (6, 8)  
Point D = (9, 5)  
Point E = (2, 7)



## Problem Solving 1

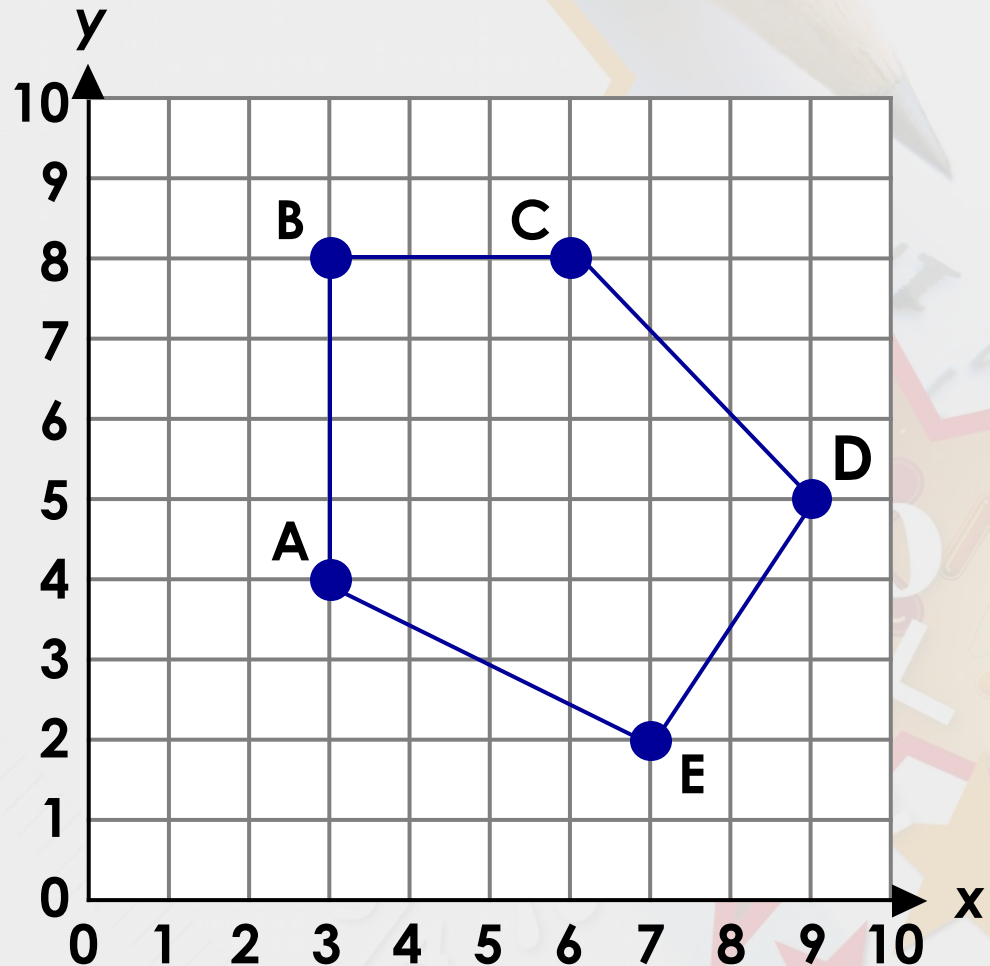
Billy has written the coordinates for a pentagon. Correct any mistakes he has made.

Billy read the  $y$  axis before the  $x$  axis for Points A and E, which should have been  $(3, 4)$  and  $(7, 2)$ .



Billy

- Point A =  $(3, 4)$
- Point B =  $(3, 8)$
- Point C =  $(6, 8)$
- Point D =  $(9, 5)$
- Point E =  $(7, 2)$





## Problem Solving 2

**$A = (3, 5)$ ,  $C = (8, 3)$ . Use this information to work out the coordinates of points B, D, E and F.**

**Point A =  $(3, 5)$**

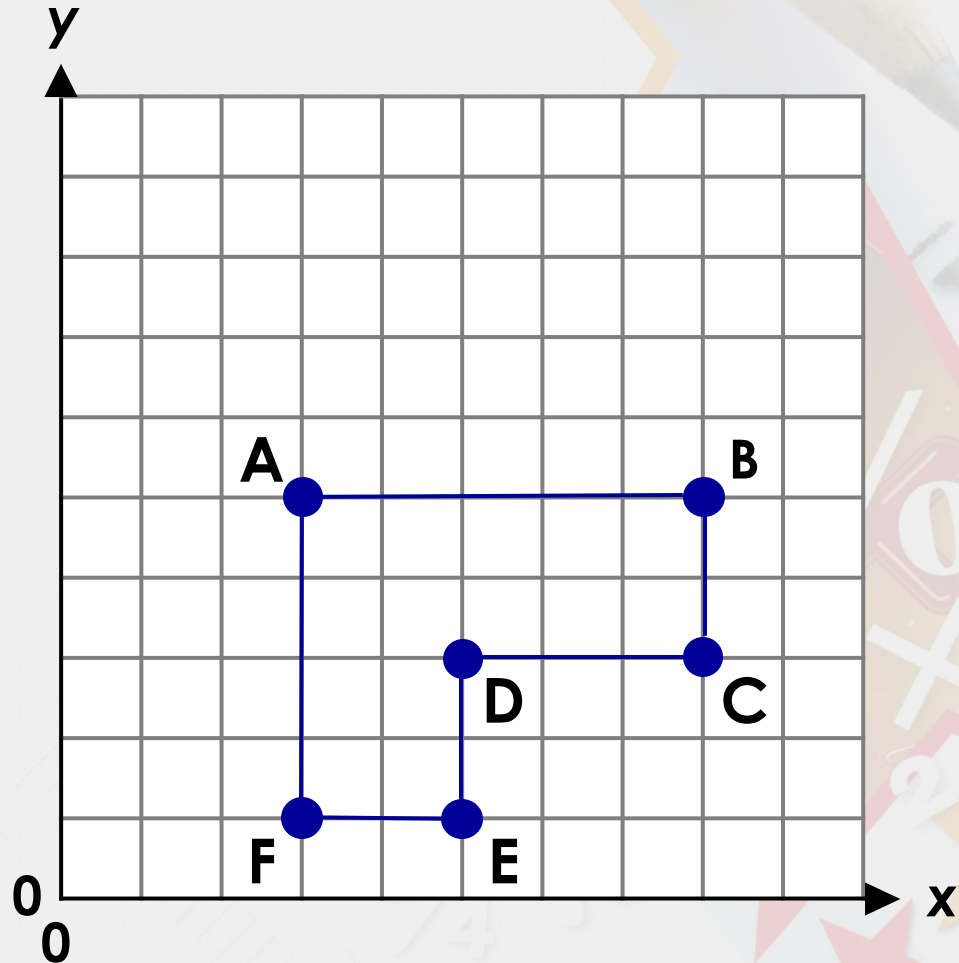
**Point B =  $( , )$**

**Point C =  $(8, 3)$**

**Point D =  $( , )$**

**Point E =  $( , )$**

**Point F =  $( , )$**



## Problem Solving 2

$A = (3, 5)$ ,  $C = (8, 3)$ . Use this information to work out the coordinates of points B, D, E and F.

Point A =  $(3, 5)$

Point B =  $(8, 5)$

Point C =  $(8, 3)$

Point D =  $(5, 3)$

Point E =  $(5, 1)$

Point F =  $(3, 1)$

