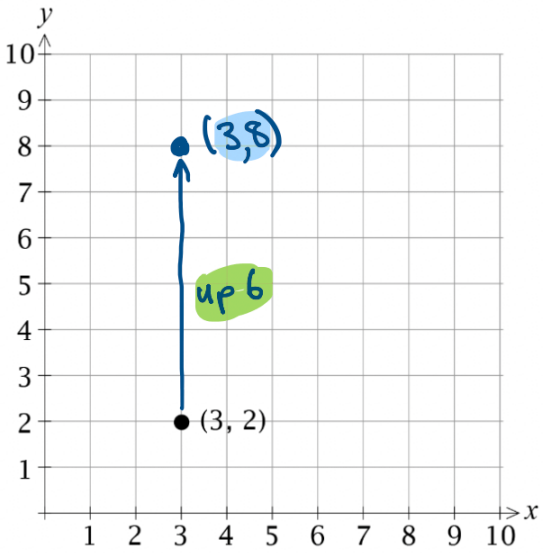
No calculators are permitted in this exercise.

Ex 6.1

Name:

Worked Example for Simple Questions



* Count up by 6 on the cartesian plane.
* Note only the y-value changes. The x value stays the same

$(3, 2) \rightarrow (3, 2+6) \rightarrow (3, 8)$

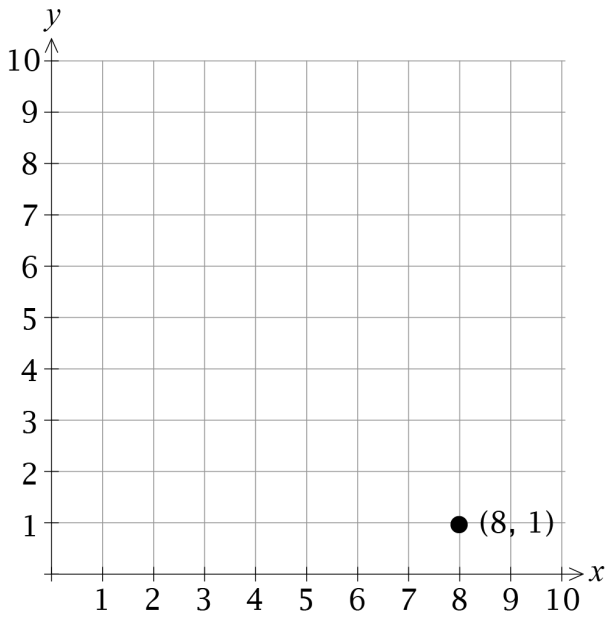
The point $(3, 2)$ is moved **up** by 6. What are the new coordinates?

A	B	C
$(3, 8)$	$(4, 3)$	$(3, 2)$

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Moving Coordinates Up

Question 1



The point $(8, 1)$ is moved **up** by 3. What are the new coordinates?

Circle the correct option

A

$(6, 3)$

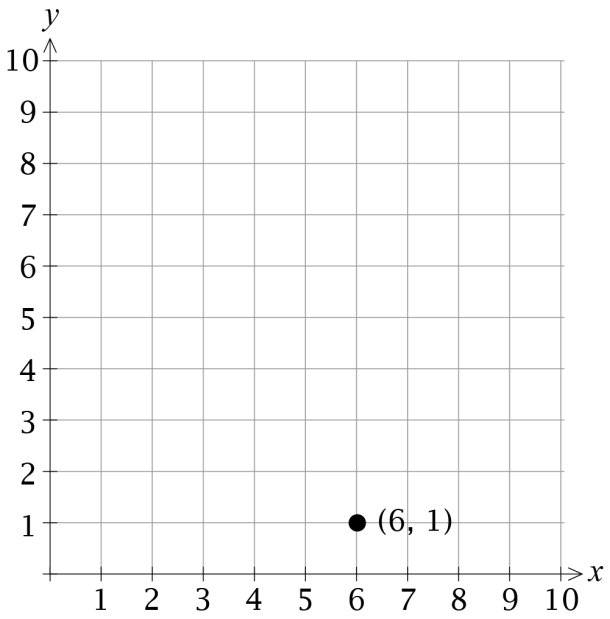
B

$(8, 4)$

C

$(8, 3)$

Question 2



The point $(6, 1)$ is moved **up** by 5. What are the new coordinates?

Circle the correct option

A

$(6, 1)$

B

$(5, 3)$

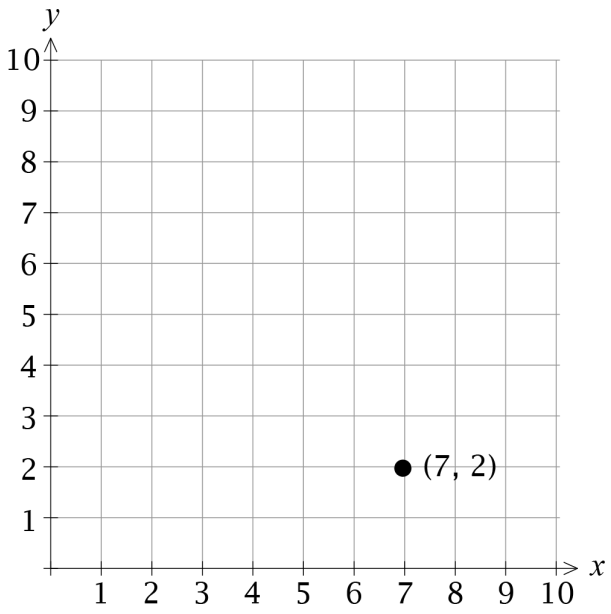
C

$(6, 6)$

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Moving Coordinates Up

Question 3



The point $(7, 2)$ is moved **up** by 3. What are the new coordinates?

Circle the correct option

A

$(7, 5)$

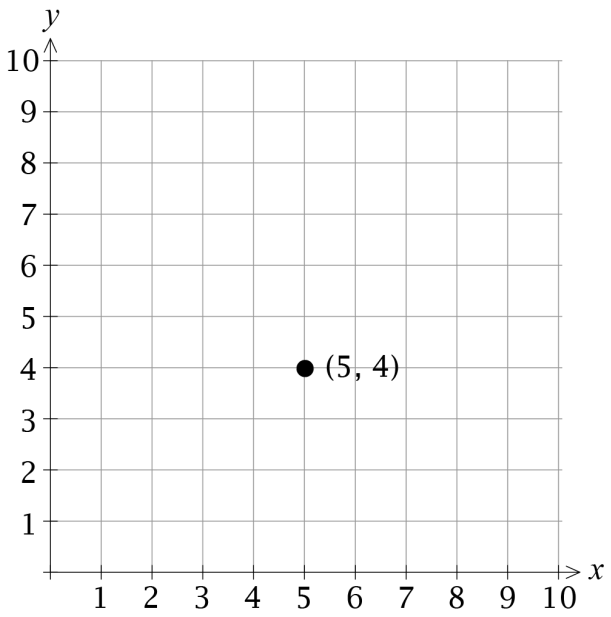
B

$(4, 3)$

C

$(7, 2)$

Question 4



The point $(5, 4)$ is moved **up** by 3. What are the new coordinates?

Circle the correct option

A

$(5, 4)$

B

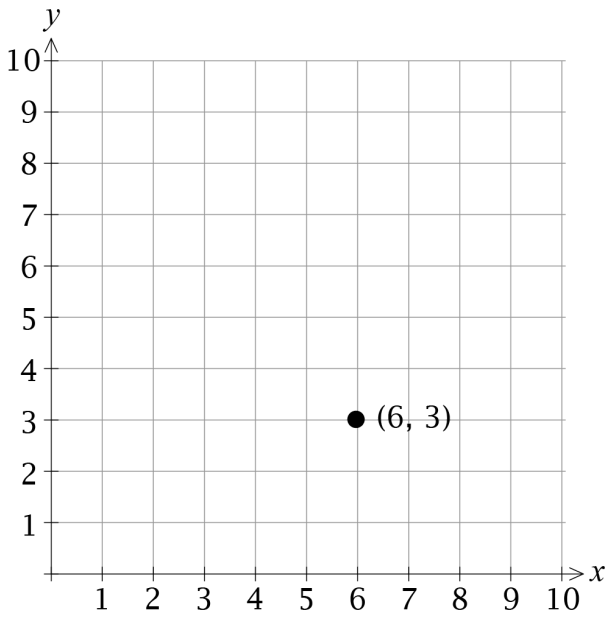
$(5, 7)$

C

$(6, 2)$

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Question 5



The point $(6, 3)$ is moved **up** by 4. What are the new coordinates?

Circle the correct option

A

$(3, 9)$

B

$(6, 3)$

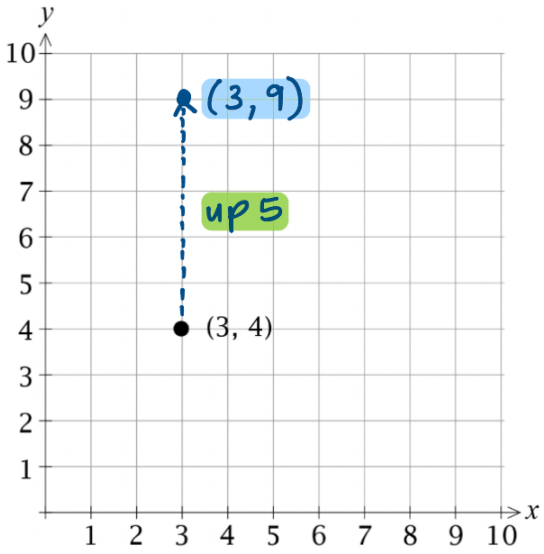
C

$(6, 7)$

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Worked Example for Standard Questions

The point $(3, 4)$ is moved **up** by 5.



* Count up by 5 on the Cartesian plane.
* Note the y-value changes. The x-value stays the same.

$(3,4) \rightarrow (3, 4+5) \rightarrow (3,9)$

Write the new coordinates:

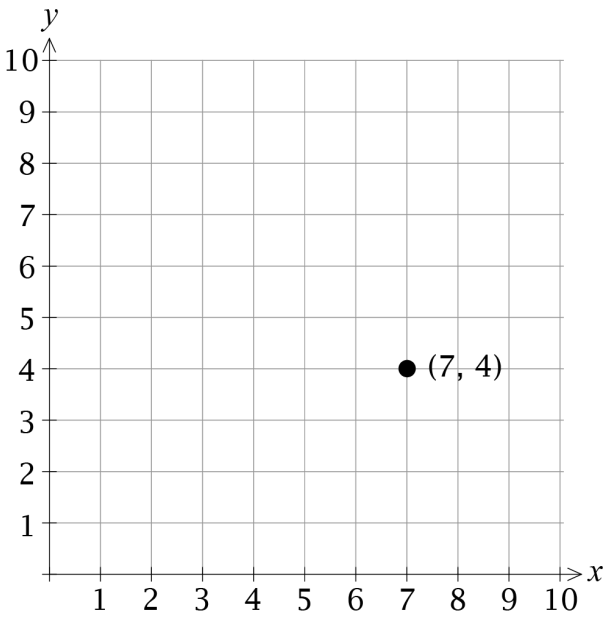
$(\ 3\ ,\ 9\ )$

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Moving Coordinates Up

Question 6

The point $(7, 4)$ is moved **up** by 5.

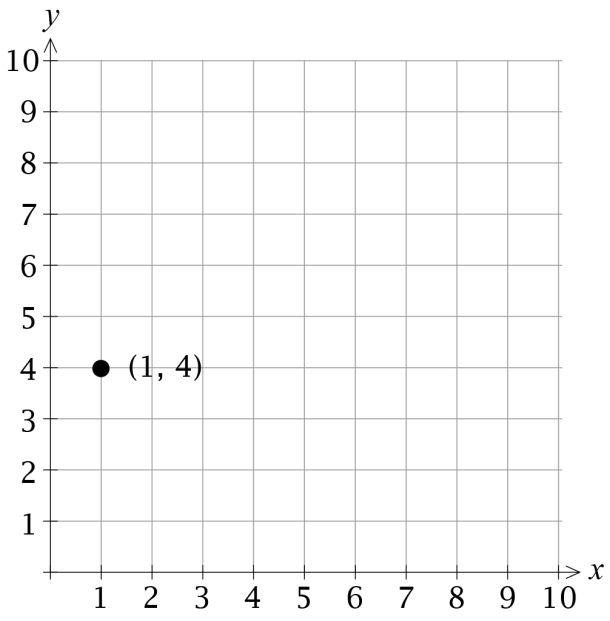


Write the new coordinates:

$\left(\square, \square\right)$

Question 7

The point $(1, 4)$ is moved **up** by 1.



Write the new coordinates:

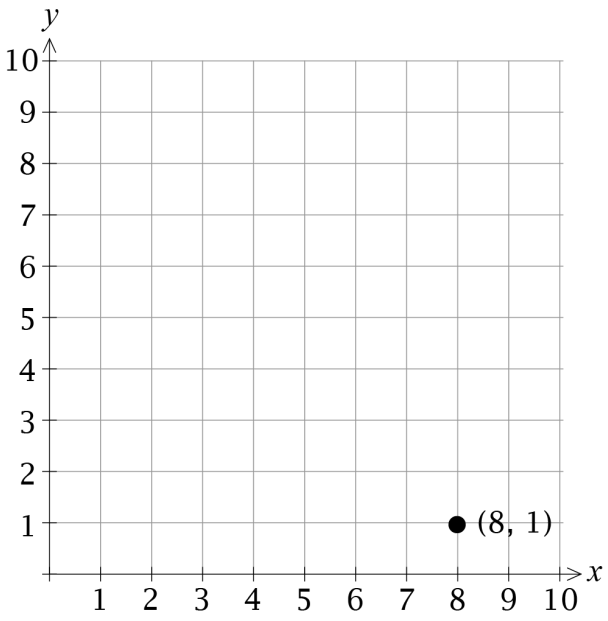
$\left(\square, \square\right)$

Copyright © Maths Pathway 2025.

Moving Coordinates Up

Question 8

The point $(8, 1)$ is moved **up** by 6.

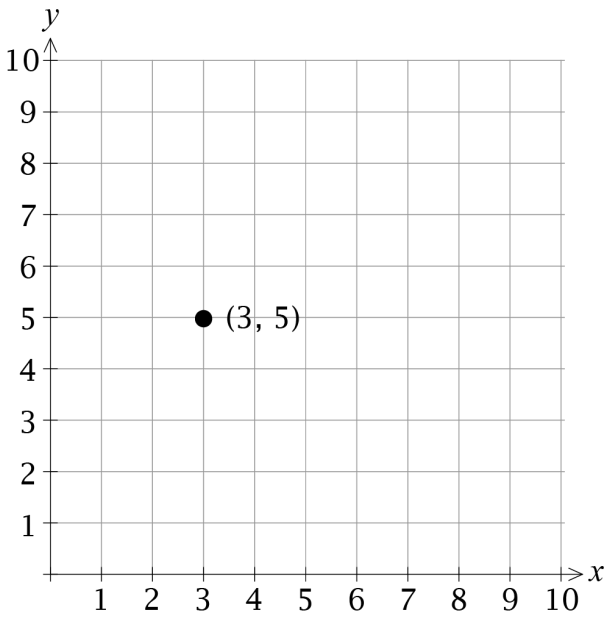


Write the new coordinates:

$\left(\square, \square\right)$

Question 9

The point $(3, 5)$ is moved **up** by 4.



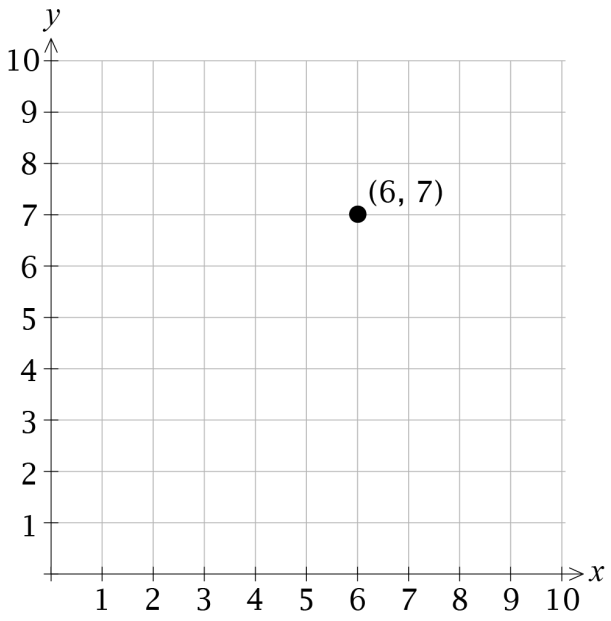
Write the new coordinates:

$\left(\square, \square\right)$

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Question 10

The point $(6, 7)$ is moved **up** by 3.



Write the new coordinates:

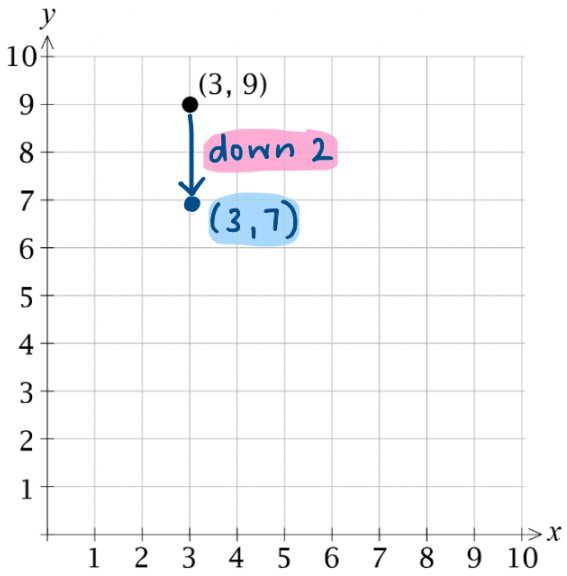
$\left(\square, \square\right)$

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Ex 6.3

No calculators are permitted in this exercise.

Worked Example for Simple Questions



* Count down by 2 on the Cartesian Plane.

* The x-coordinate stays the same. The y-coordinate changes.

$(3,9) \rightarrow (3,9-2) \rightarrow (3,7)$

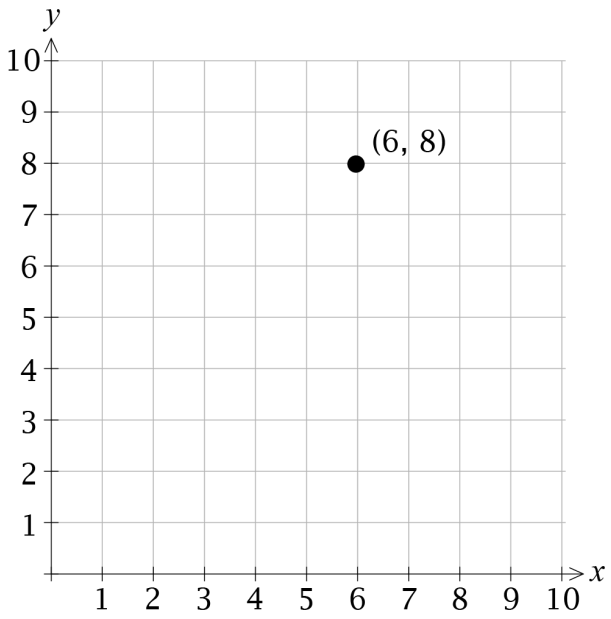
The point $(3, 9)$ is moved **down** by 2. What are the new coordinates?

A	B	C
$(2, 6)$	$(3, 7)$	$(1, 7)$

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Moving Coordinates Down

Question 1



The point $(6, 8)$ is moved **down** by 5. What are the new coordinates?

Circle the correct option

A

$(1, 3)$

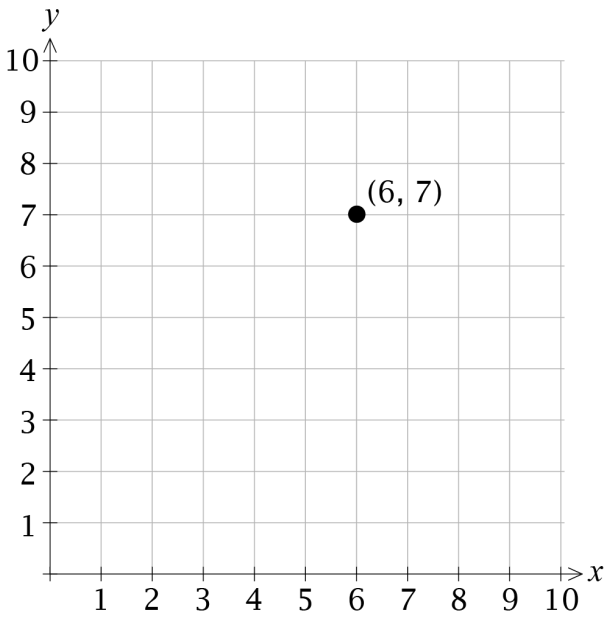
B

$(5, 4)$

C

$(6, 3)$

Question 2



The point $(6, 7)$ is moved **down** by 5. What are the new coordinates?

Circle the correct option

A

$(6, 2)$

B

$(1, 2)$

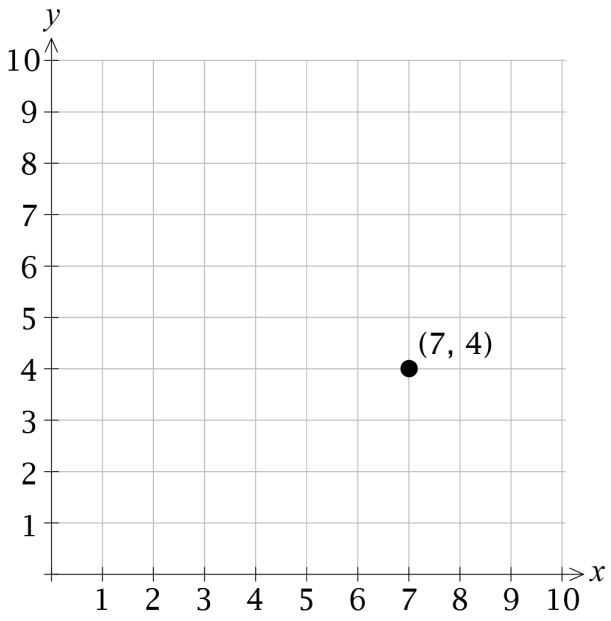
C

$(5, 1)$

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Moving Coordinates Down

Question 3



The point $(7, 4)$ is moved **down** by 4. What are the new coordinates?

Circle the correct option

A

$(4, 1)$

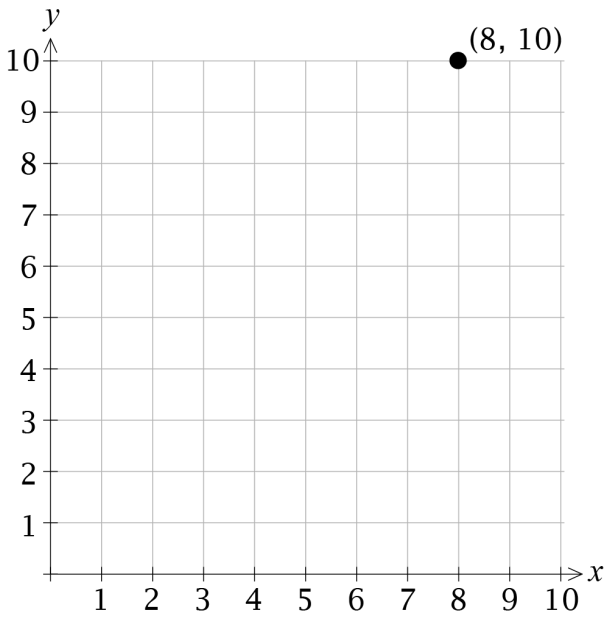
B

$(7, 0)$

C

$(3, 0)$

Question 4



The point $(8, 10)$ is moved **down** by 5. What are the new coordinates?

Circle the correct option

A

$(8, 5)$

B

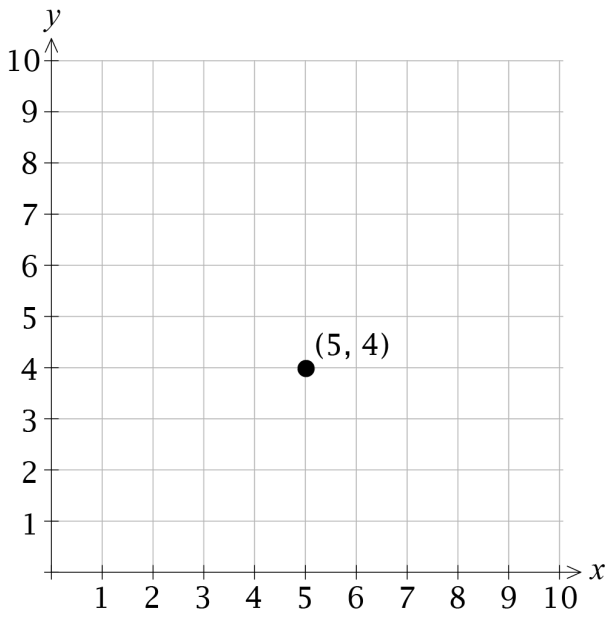
$(5, 6)$

C

$(3, 5)$

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Question 5



The point $(5, 4)$ is moved **down** by 1. What are the new coordinates?

Circle the correct option

A

$(4, 3)$

B

$(1, 2)$

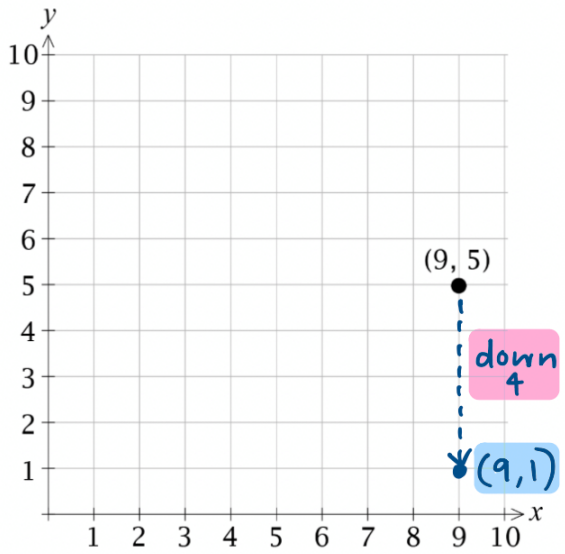
C

$(5, 3)$

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Worked Example for Standard Questions

The point $(9, 5)$ is moved **down** by 4.



* Count down by 4 on the Cartesian plane.

* The y-value changes.
  The x-value stays the same.

$(9, 5) \rightarrow (9, 5-4) \rightarrow (9, 1)$

Write the new coordinates:

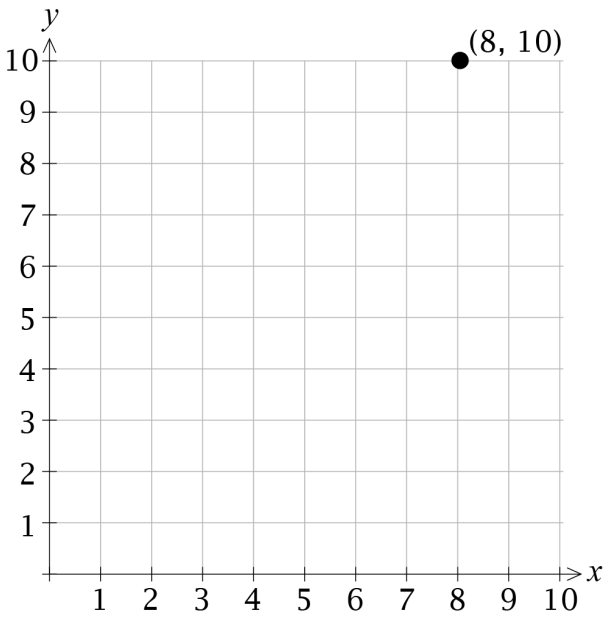
$(\ 9\ ,\ 1\ )$

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Moving Coordinates Down

Question 6

The point $(8, 10)$ is moved **down** by 7.

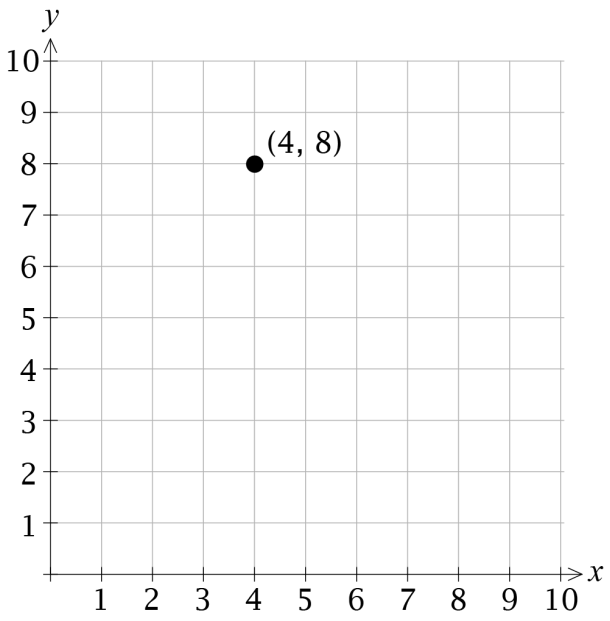


Write the new coordinates:

$\left(\square, \square\right)$

Question 7

The point $(4, 8)$ is moved **down** by 6.



Write the new coordinates:

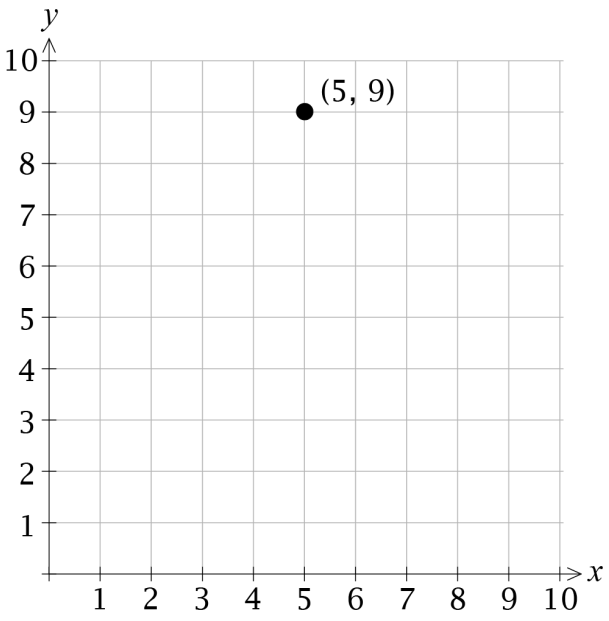
$\left(\square, \square\right)$

Copyright © Maths Pathway 2025.

Moving Coordinates Down

Question 8

The point $(5, 9)$ is moved **down** by 1.

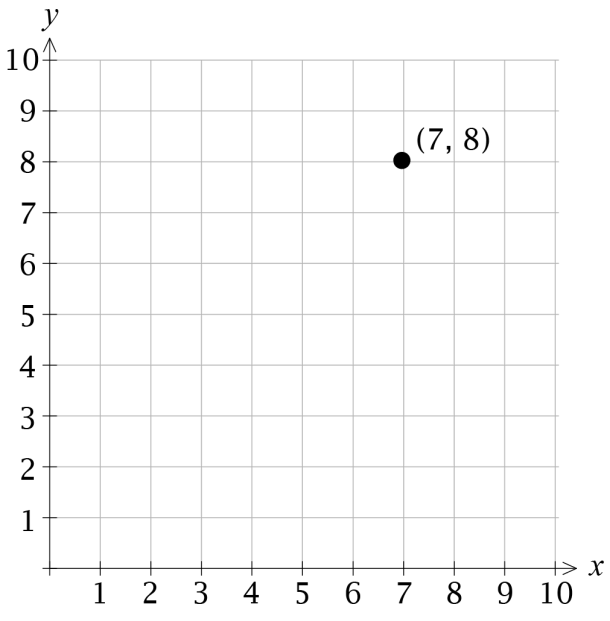


Write the new coordinates:

$\left(\square, \square\right)$

Question 9

The point $(7, 8)$ is moved **down** by 3.



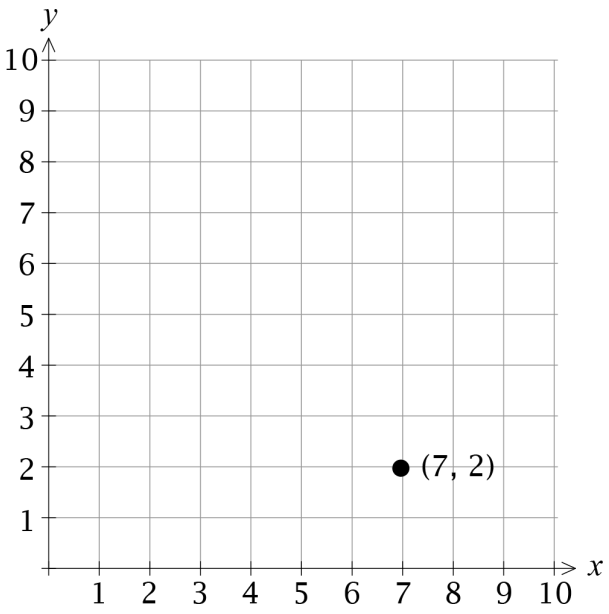
Write the new coordinates:

$\left(\square, \square\right)$

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Question 10

The point $(7, 2)$ is moved **down** by 2.



Write the new coordinates:

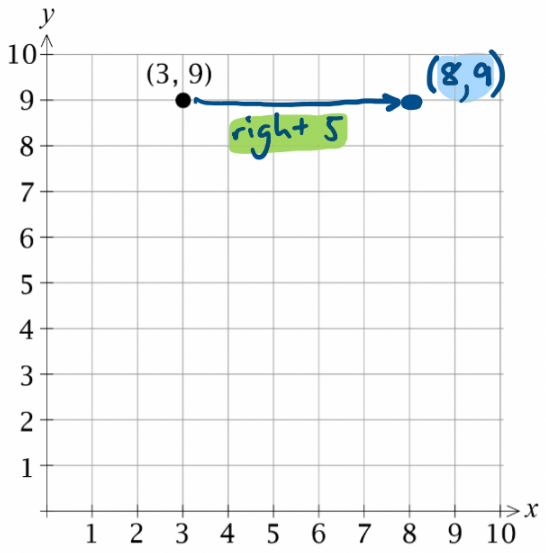
$\left(\square, \square\right)$

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Ex 6.5

No calculators are permitted in this exercise.

Worked Example for Simple Questions



* Count right by 5 on the Cartesian plane.
- The y-coordinate stays the same
- The x-coordinate changes

$(3,9) \rightarrow (3+5, 9) \rightarrow (8,9)$

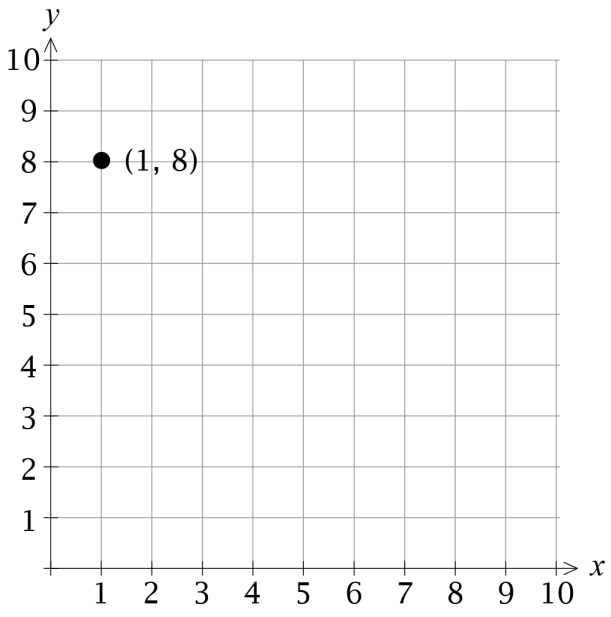
The point $(3, 9)$ is moved **right** by 5. What are the new coordinates?

A	B	C
$(8, 9)$	$(3, 9)$	$(1, 5)$

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Moving Coordinates Right

Question 1



The point $(1, 8)$ is moved **right** by 6. What are the new coordinates?

Circle the correct option

A

$(7, 8)$

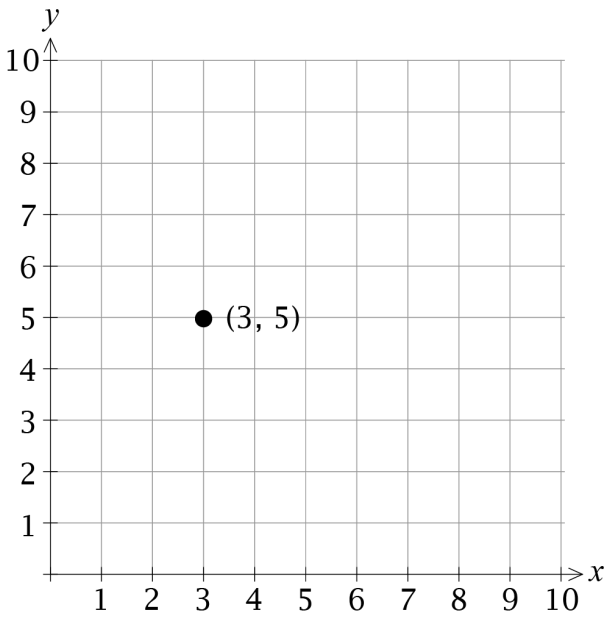
B

$(4, 6)$

C

$(1, 8)$

Question 2



The point $(3, 5)$ is moved **right** by 2. What are the new coordinates?

Circle the correct option

A

$(5, 5)$

B

$(2, 4)$

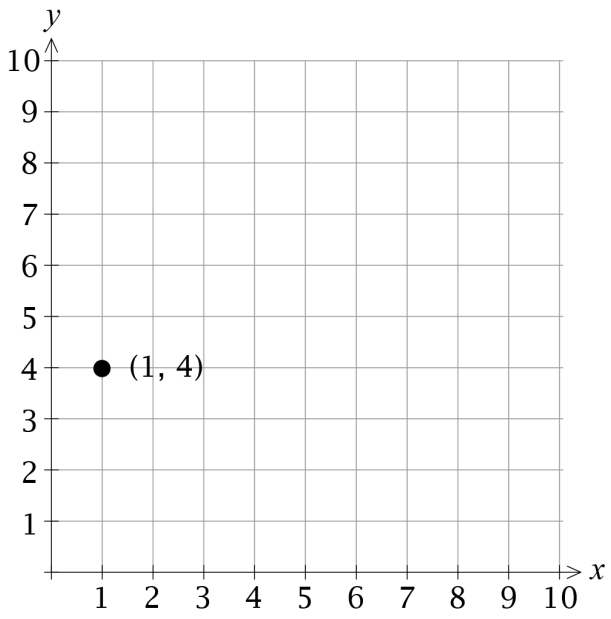
C

$(3, 5)$

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Moving Coordinates Right

Question 3



The point $(1, 4)$ is moved **right** by 7. What are the new coordinates?

Circle the correct option

A

$(1, 4)$

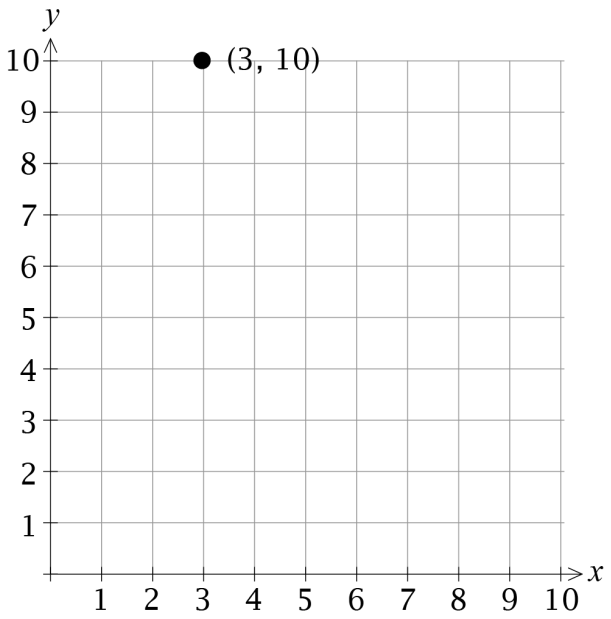
B

$(3, 6)$

C

$(8, 4)$

Question 4



The point $(3, 10)$ is moved **right** by 4. What are the new coordinates?

Circle the correct option

A

$(3, 10)$

B

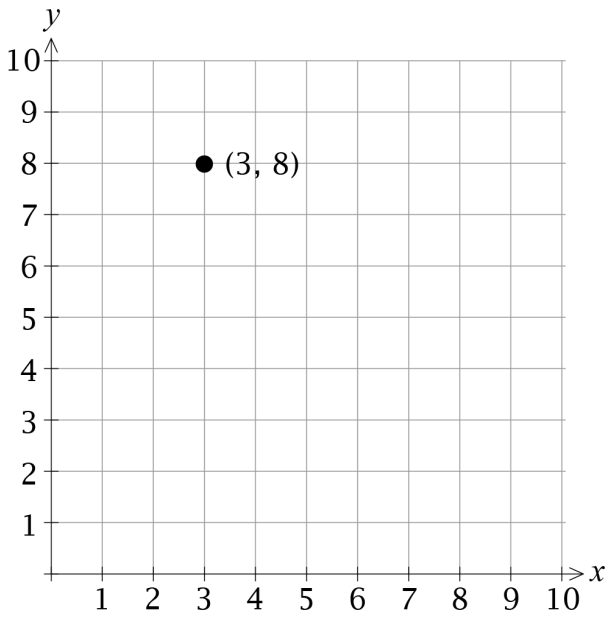
$(7, 10)$

C

$(5, 8)$

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Question 5



The point $(3, 8)$ is moved **right** by 3. What are the new coordinates?

Circle the correct option

A

$(3, 8)$

B

$(2, 4)$

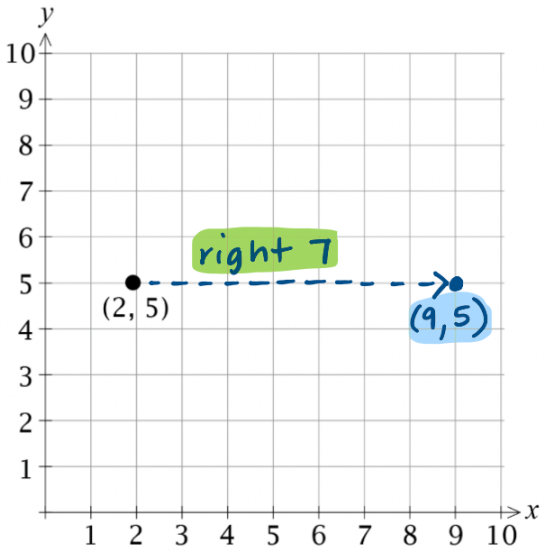
C

$(6, 8)$

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Worked Example for Standard Questions

The point $(2, 5)$ is moved **right** by 7.



* Count right by 7 on the Cartesian plane.

* The x-value changes.
  The y-value stays the same.
  $(2, 5) \rightarrow (2+7, 5) \rightarrow (9, 5)$

Write the new coordinates:

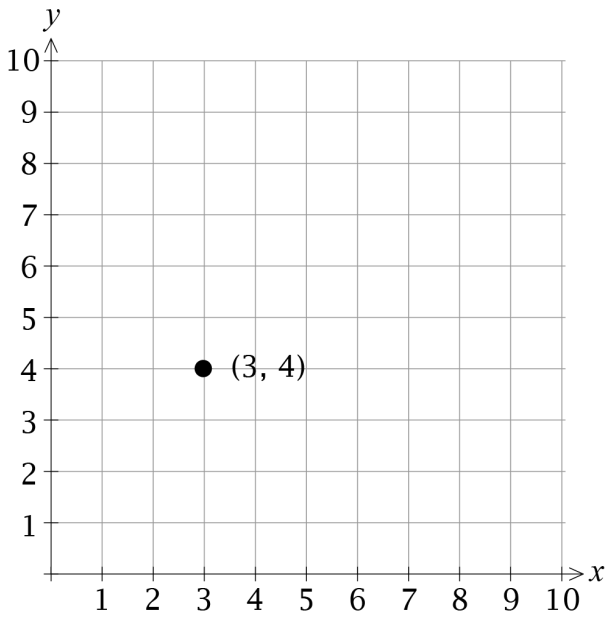
(9 , 5)

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Moving Coordinates Right

Question 6

The point $(3, 4)$ is moved **right** by 4.

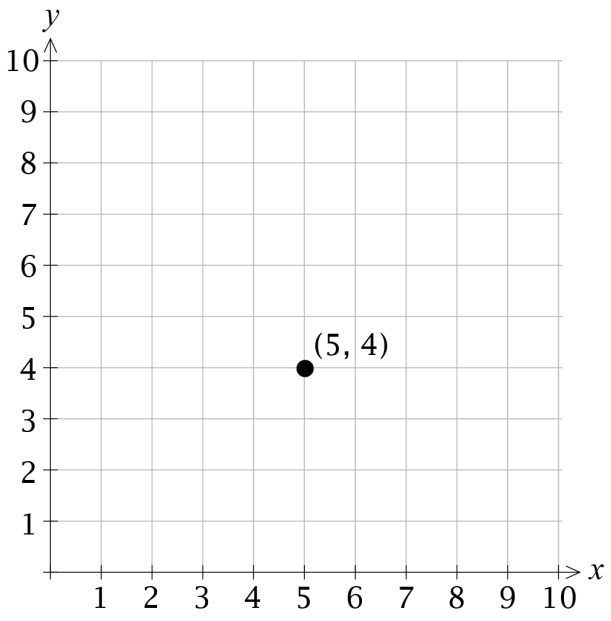


Write the new coordinates:

$\left(\square, \square\right)$

Question 7

The point $(5, 4)$ is moved **right** by 1.



Write the new coordinates:

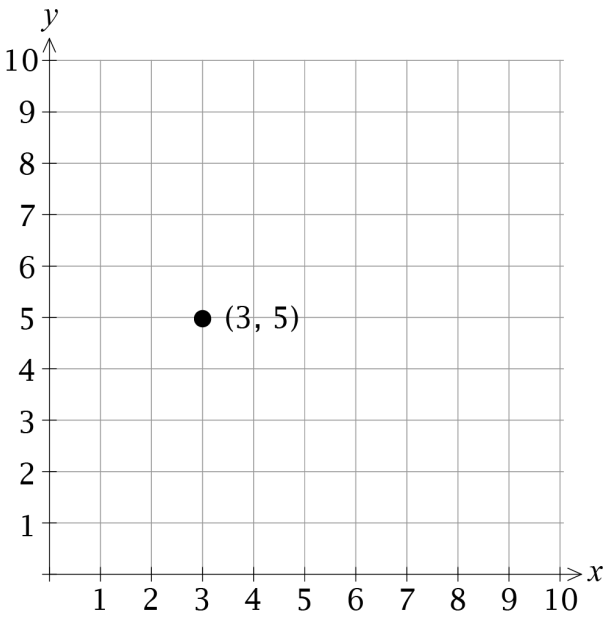
$\left(\square, \square\right)$

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Moving Coordinates Right

Question 8

The point $(3, 5)$ is moved **right** by 3.

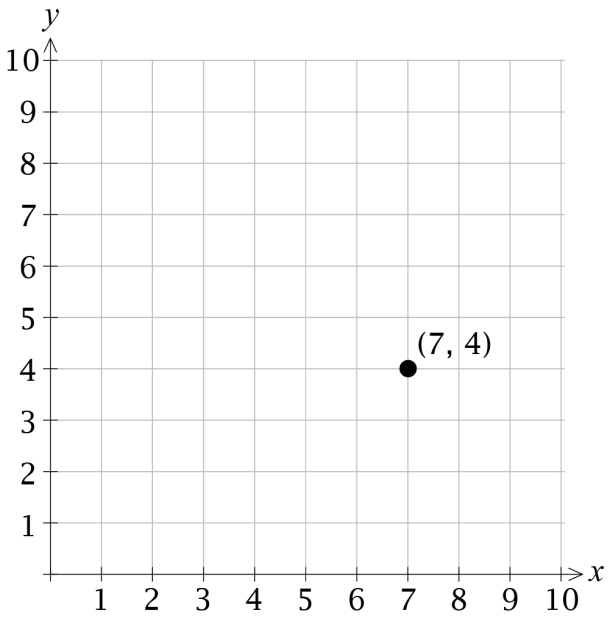


Write the new coordinates:

$\left(\square, \square\right)$

Question 9

The point $(7, 4)$ is moved **right** by 3.



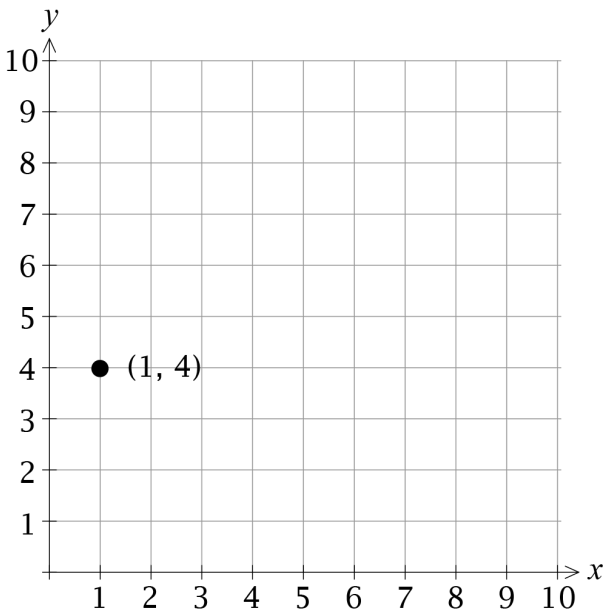
Write the new coordinates:

$\left(\square, \square\right)$

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Question 10

The point $(1, 4)$ is moved **right** by 8.



Write the new coordinates:

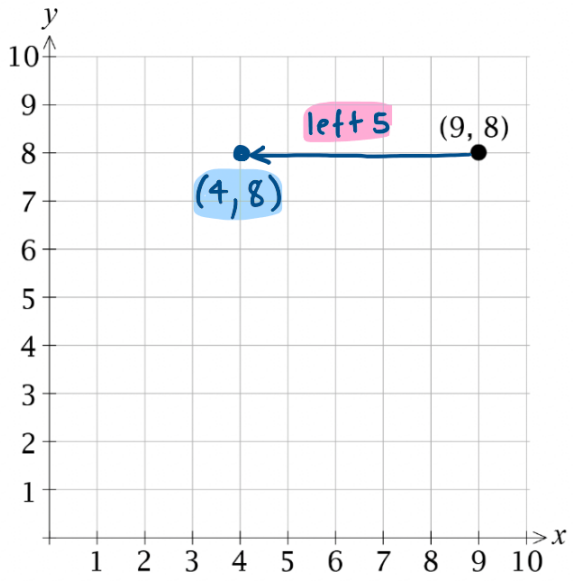
$\left(\square, \square\right)$

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Ex 6.7

No calculators are permitted in this exercise.

Worked Example for Simple Questions



* Count left by 5 on the Cartesian Plane.

* The y-coordinate stays the same. The x-coordinate changes.

$(9,8) \rightarrow (9-5, 8) \rightarrow (4,8)$

The point $(9, 8)$ is moved **left** by 5. What are the new coordinates?

A $(4, 3)$

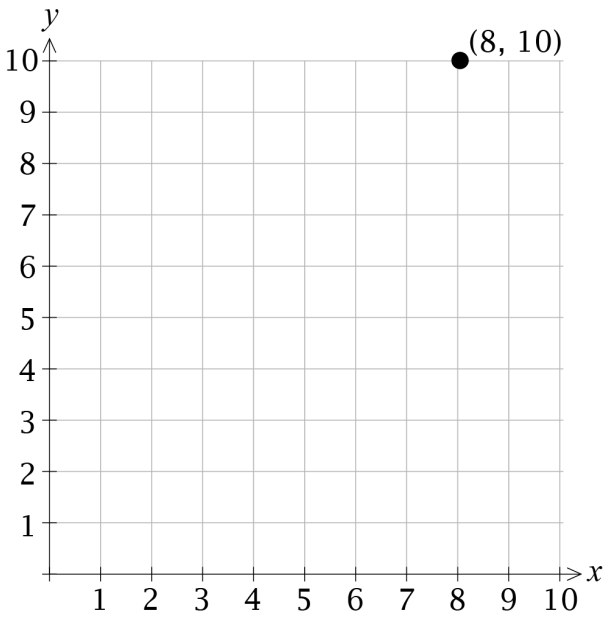
B $(5, 7)$

C $(4, 8)$

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Moving Coordinates Left

Question 1



The point $(8, 10)$ is moved **left** by 4. What are the new coordinates?

Circle the correct option

A

$(4, 10)$

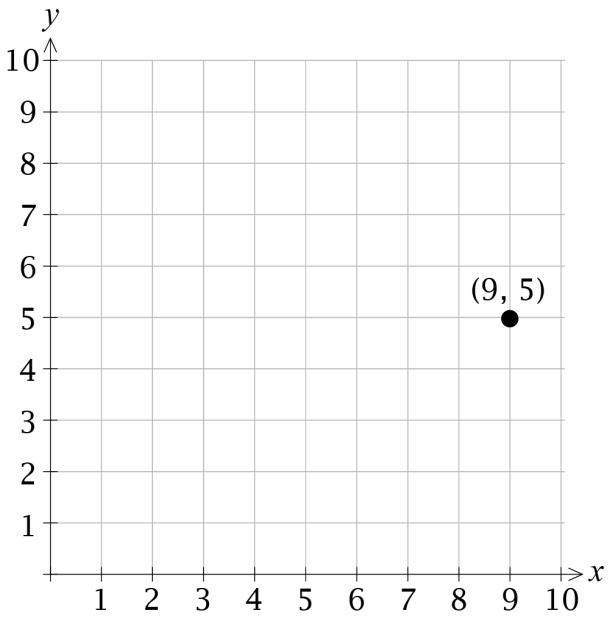
B

$(4, 8)$

C

$(4, 6)$

Question 2



The point $(9, 5)$ is moved **left** by 5. What are the new coordinates?

Circle the correct option

A

$(4, 0)$

B

$(5, 3)$

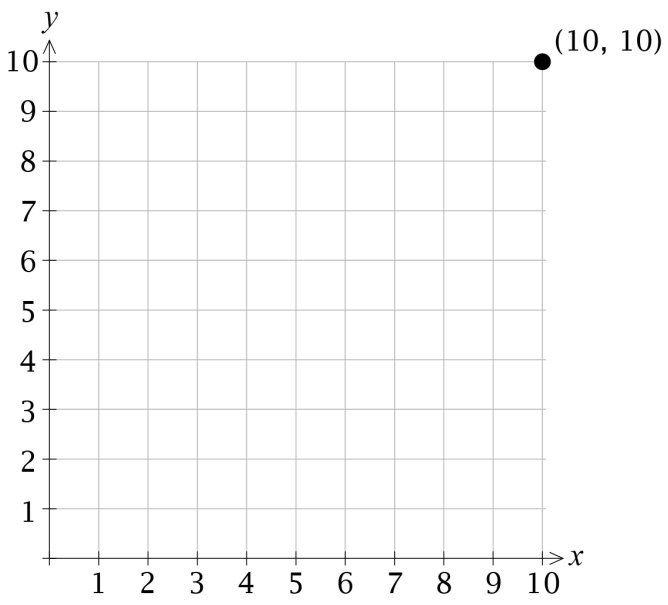
C

$(4, 5)$

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Moving Coordinates Left

Question 3



The point $(10, 10)$ is moved **left** by 6. What are the new coordinates?

Circle the correct option

A

$(6, 5)$

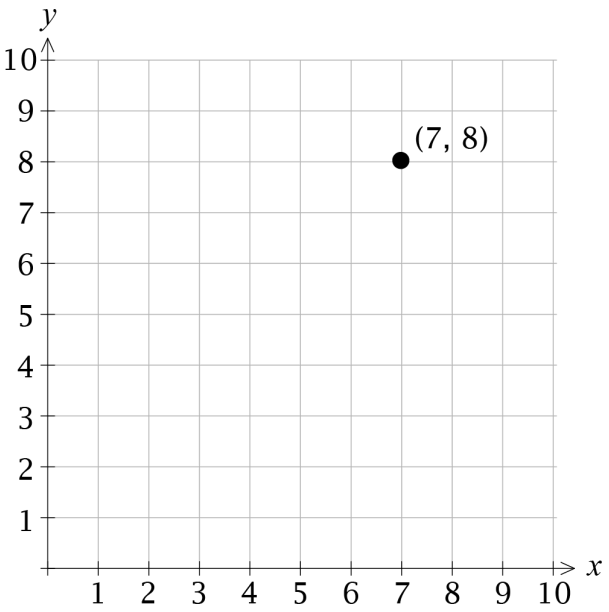
B

$(4, 10)$

C

$(4, 4)$

Question 4



The point $(7, 8)$ is moved **left** by 5. What are the new coordinates?

Circle the correct option

A

$(2, 3)$

B

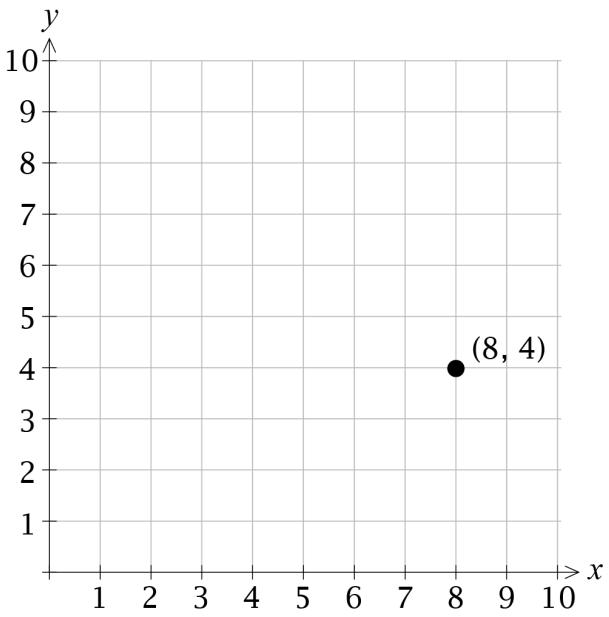
$(2, 8)$

C

$(5, 2)$

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Question 5



The point $(8, 4)$ is moved **left** by 7. What are the new coordinates?

Circle the correct option

A

$(1, 4)$

B

$(7, 3)$

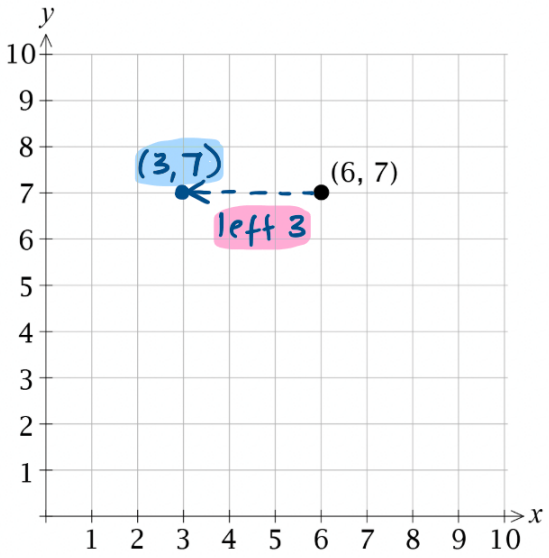
C

$(1, 0)$

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Worked Example for Standard Questions

The point $(6, 7)$ is moved **left** by 3.



* Count left by 3 on the Cartesian plane.

* The x-value changes. The y-value stays the same.

$(6,7) \rightarrow (6-3, 7) \rightarrow (3,7)$

Write the new coordinates:

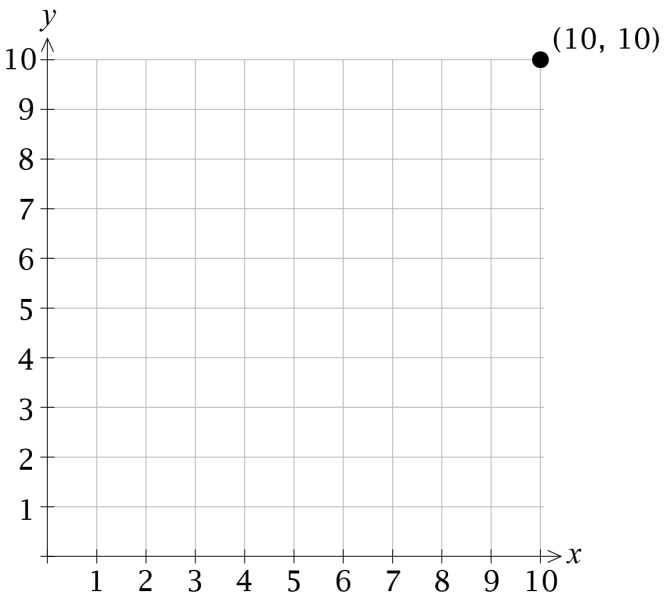
$(\ 3\ ,\ 7\ )$

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Moving Coordinates Left

Question 6

The point $(10, 10)$ is moved **left** by 5.

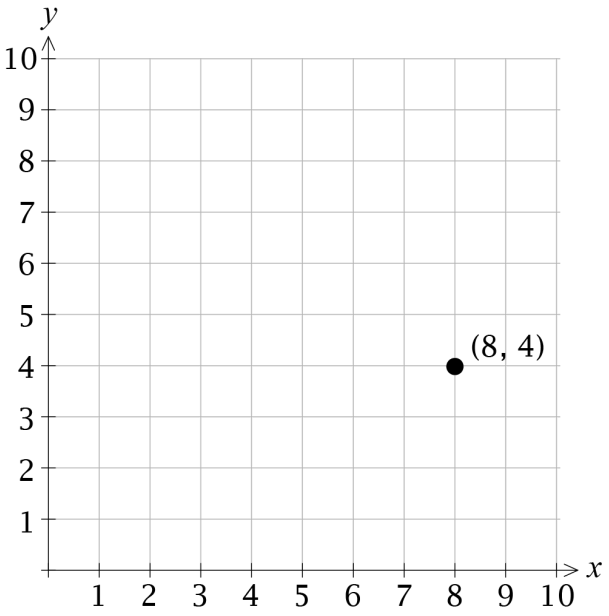


Write the new coordinates:

$\left(\square, \square\right)$

Question 7

The point $(8, 4)$ is moved **left** by 3.



Write the new coordinates:

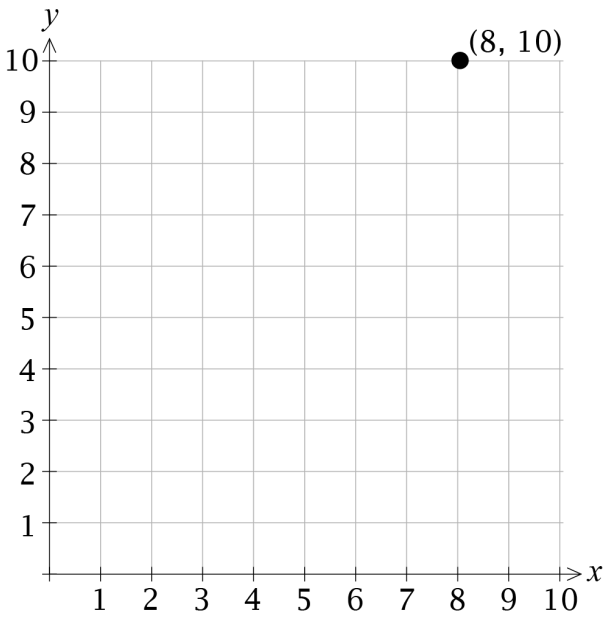
$\left(\square, \square\right)$

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Moving Coordinates Left

Question 8

The point $(8, 10)$ is moved **left** by 6.

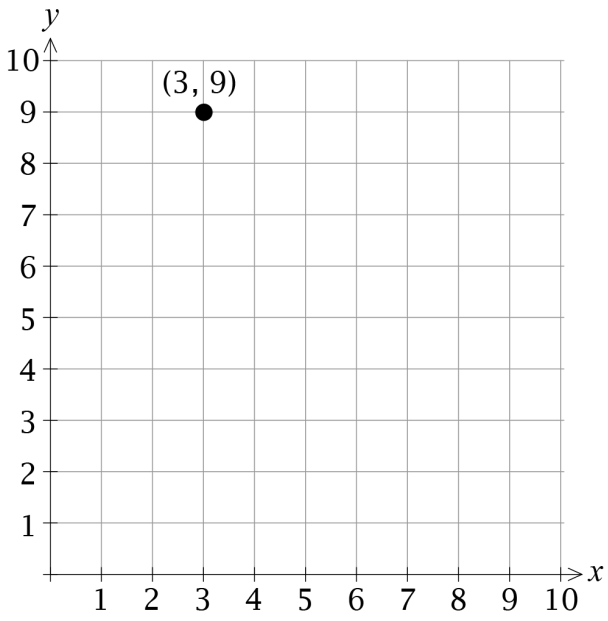


Write the new coordinates:

$\left(\square, \square\right)$

Question 9

The point $(3, 9)$ is moved **left** by 2.



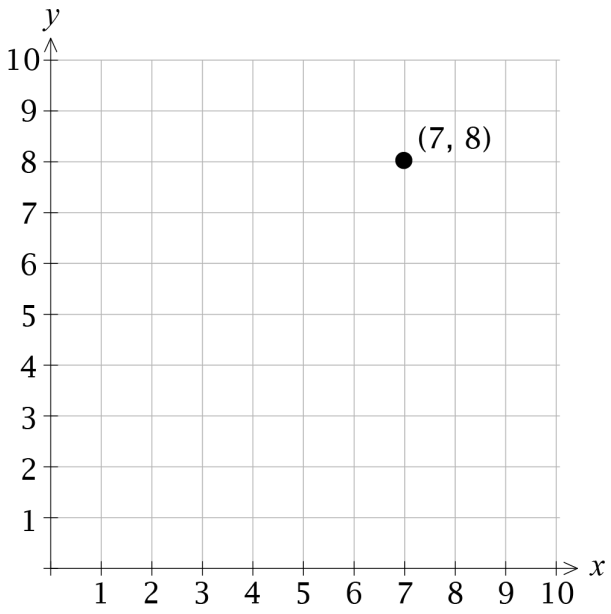
Write the new coordinates:

$\left(\square, \square\right)$

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Question 10

The point $(7, 8)$ is moved **left** by 4.



Write the new coordinates:

$\left(\square, \square\right)$

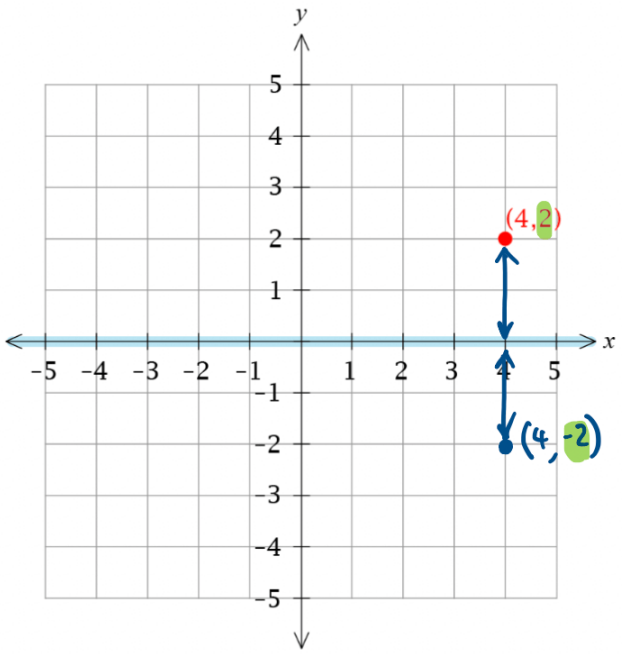
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Ex 6.9

No calculators are permitted in this exercise.

Worked Example for Simple Questions

Write the new coordinates after the point $(4, 2)$ is **reflected** in the x**-axis**.



* Reflecting in the x-axis will change the sign on the y-coordinate.

2 → -2

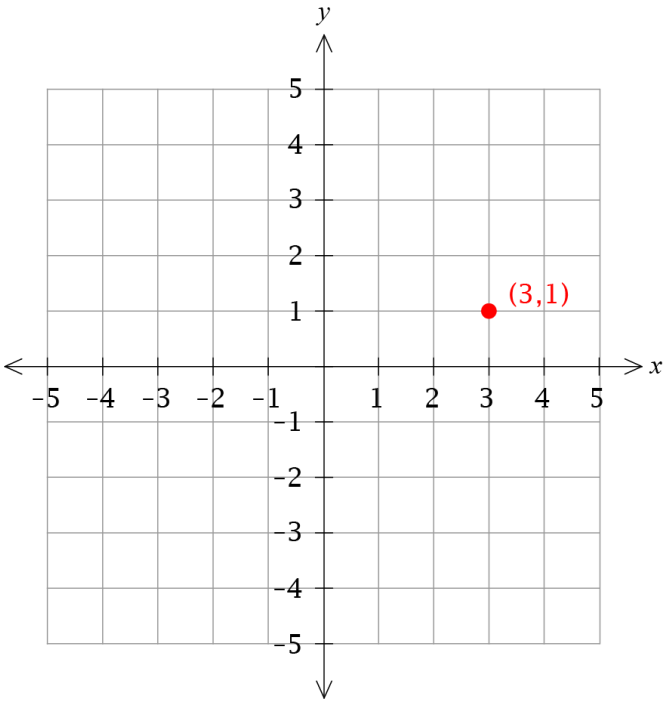
New coordinates $= (\ 4\ ,\ \boxed{-2}\ )$

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Reflections

Question 1

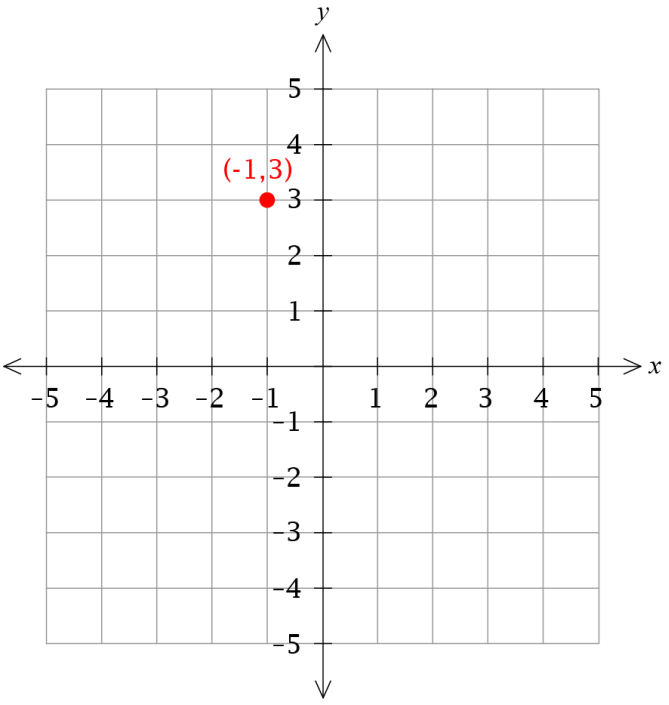
Write the new coordinates after the point $(3, 1)$ is **reflected** in the x**-axis**.



New coordinates $= (3 , \square)$

Question 2

Write the new coordinates after the point $(-1, 3)$ is **reflected** in the x**-axis**.



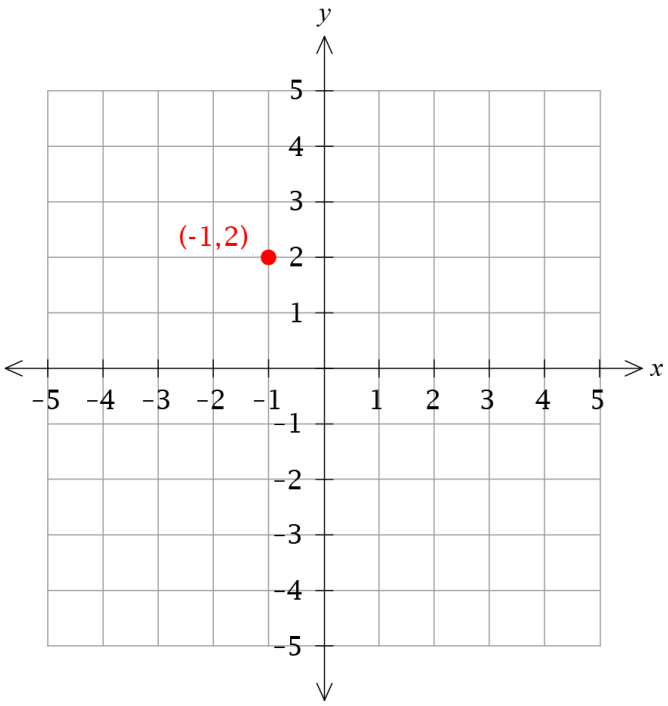
New coordinates $= (-1 , \square)$

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Reflections

Question 3

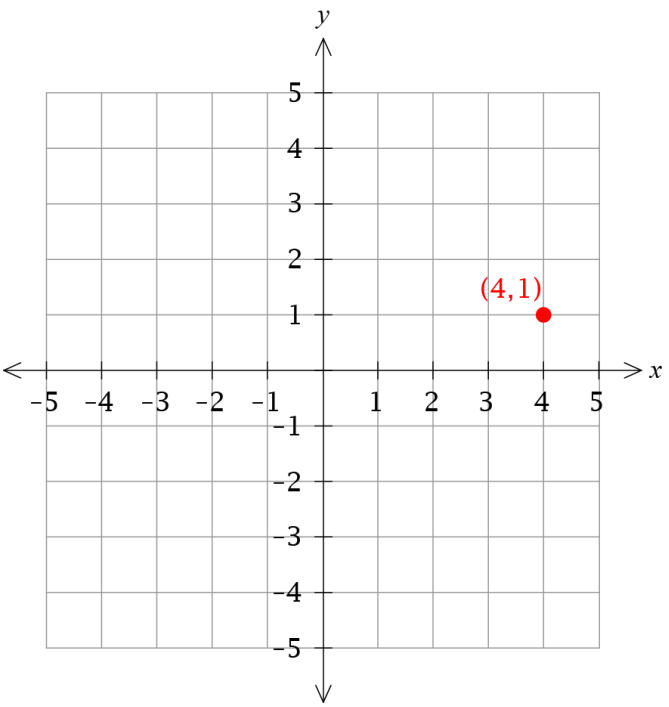
Write the new coordinates after the point $(-1, 2)$ is **reflected** in the x**-axis**.



New coordinates $= (-1 , \square)$

Question 4

Write the new coordinates after the point $(4, 1)$ is **reflected** in the x**-axis**.

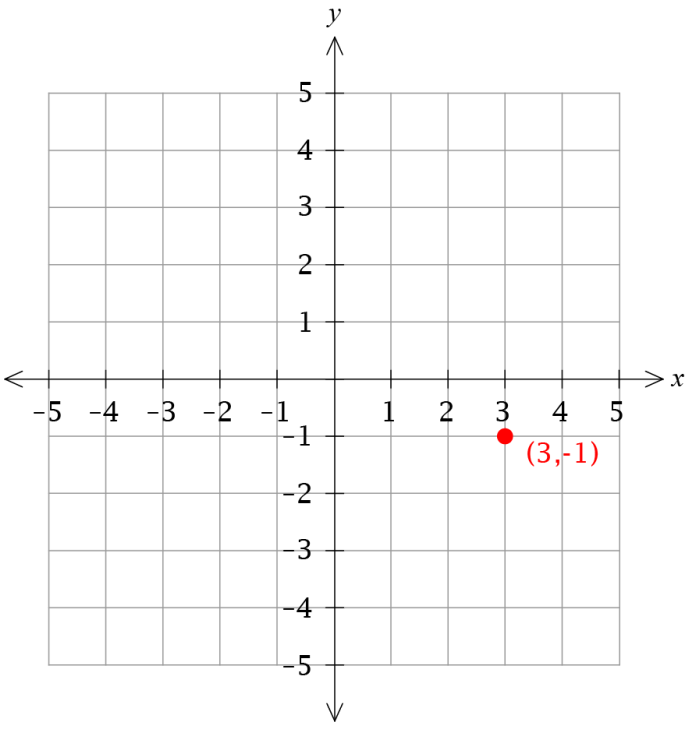


New coordinates $= (4 , \square)$

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Question 5

Write the new coordinates after the point $(3, -1)$ is **reflected** in the x**-axis**.



New coordinates $= (\ 3\ ,\ \square\ )$

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Worked Example for Standard Questions

Write the new coordinate after the point $(2, 1)$ is **reflected in the x— axis**.

(2 , -1)

$(2, 1) \longrightarrow (2, -1)$
reflect in x-axis
change sign of y-value

To reflect in the x-axis, change the sign of the y-value.
To reflect in the y-axis, change the sign of the x-value.

Question 6

Write the new coordinate after the point $(1, 5)$ is **reflected in the x— axis**.

(,)

Question 7

Write the new coordinate after the point $(-3, -2)$ is **reflected in the y— axis**.

(,)

Question 8

Write the new coordinate after the point $(-2, 5)$ is **reflected in the y— axis**.

(,)

Question 9

Write the new coordinate after the point $(-2, 1)$ is **reflected in the y— axis**.

(,)

Question 10

Write the new coordinate after the point $(5, -1)$ is **reflected in the x— axis**.

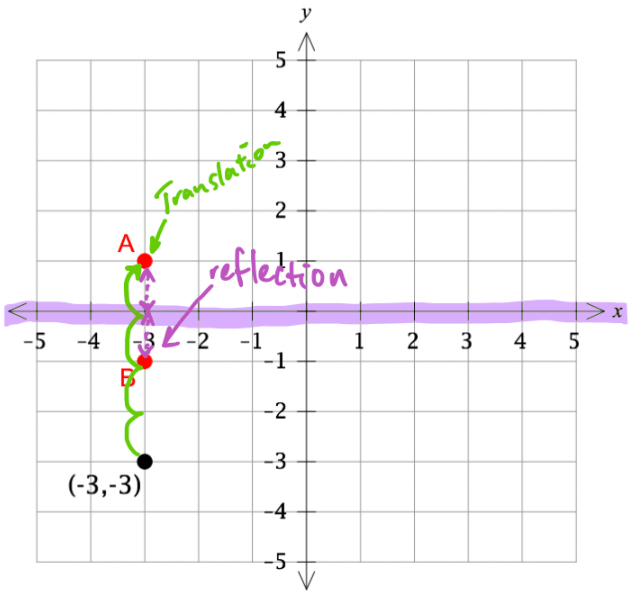
(,)

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Combinations of Transformations

No calculators are permitted in this exercise.

Worked Example for Simple Questions



Which point shows the new position of the coordinates $(-3, -3)$ when you apply the following transformations?

1. Translate **up** by 4
2. **Reflect** in the x-axis.

A

Point A

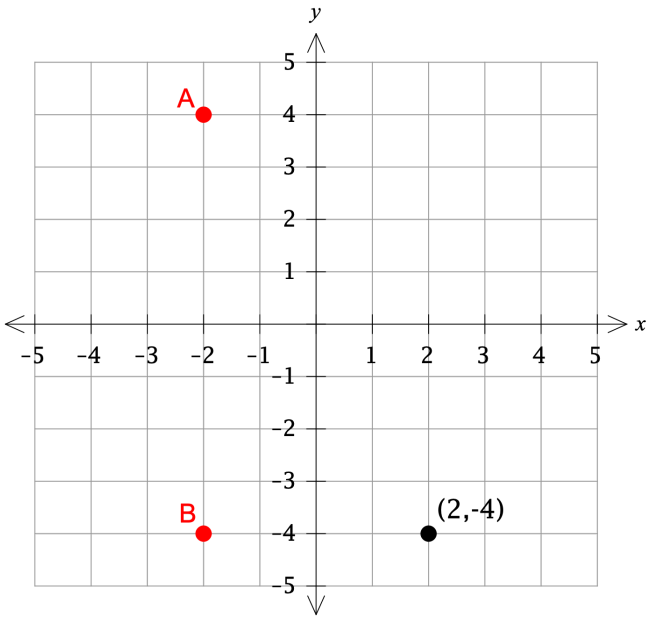
B

Point B

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Combinations of Transformations

Question 1



Which point shows the new position of the coordinates $(2, -4)$ when you apply the following transformations?

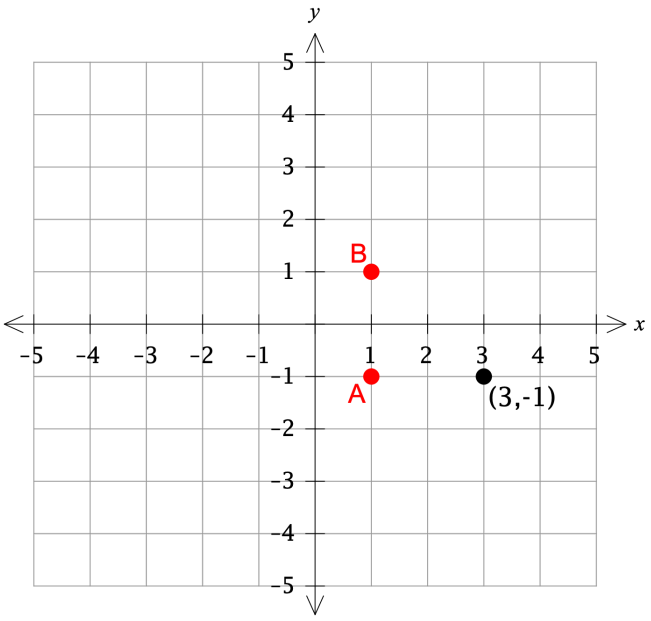
1. Translate **left** by 4

2. **Reflect** in the x-axis.

Circle the correct option

A	**B**
Point A	Point B

Question 2



Which point shows the new position of the coordinates $(3, -1)$ when you apply the following transformations?

1. Translate **left** by 2

2. **Reflect** in the x-axis.

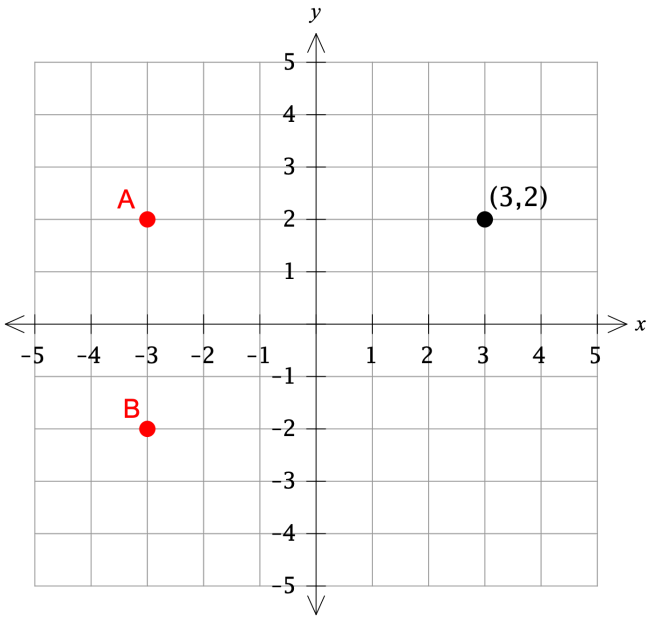
Circle the correct option

A	**B**
Point A	Point B

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Combinations of Transformations

Question 3



Which point shows the new position of the coordinates $(3, 2)$ when you apply the following transformations?

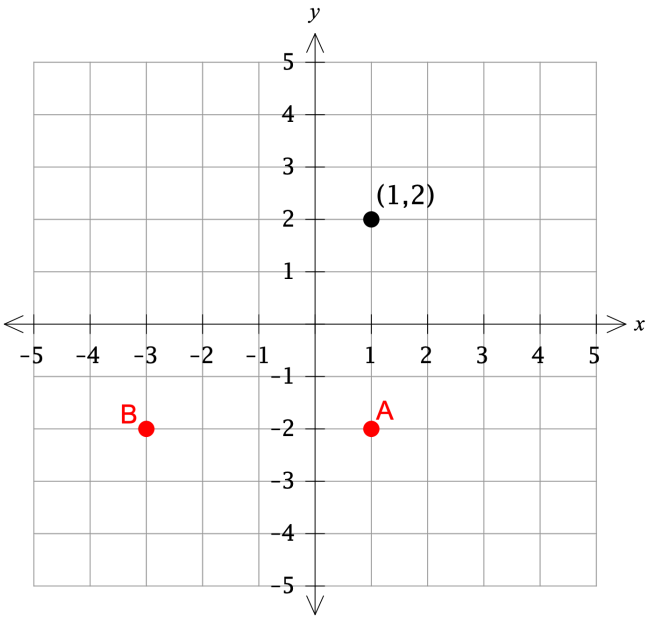
1. **Reflect** in the y-axis.

2. Translate **down** by 4

Circle the correct option

A	**B**
Point A	Point B

Question 4



Which point shows the new position of the coordinates $(1, 2)$ when you apply the following transformations?

1. **Reflect** in the x-axis

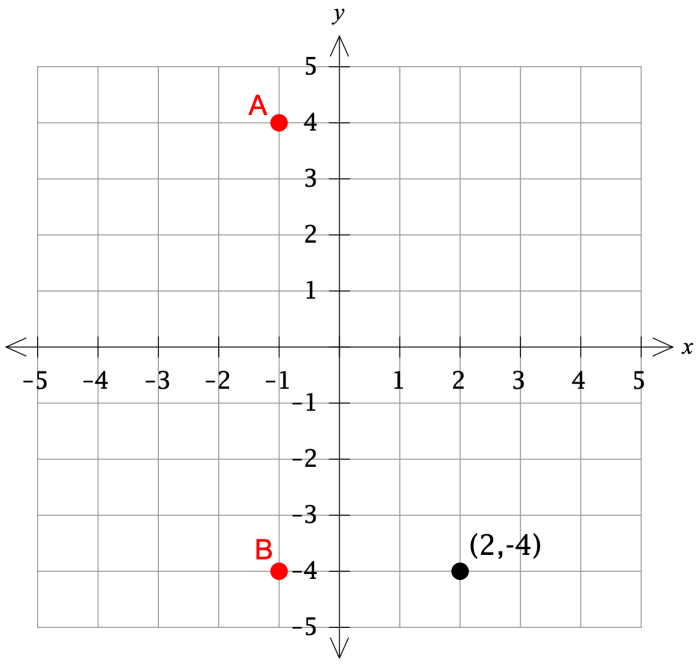
2. Translate **left** by 4.

Circle the correct option

A	**B**
Point A	Point B

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Question 5



Which point shows the new position of the coordinates $(2, -4)$ when you apply the following transformations?

1. Translate **left** by 3

2. **Reflect** in the x-axis.

Circle the correct option

A

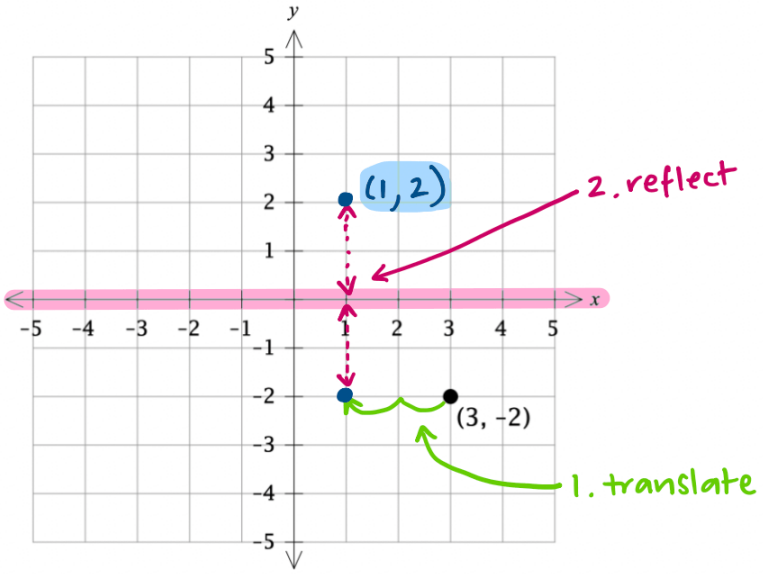
Point A

B

Point B

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Worked Example for Standard Questions



What are the new coordinates of the point $(3, -2)$ when you apply the following transformations?

1. Translate **left** by 2
2. **Reflect** in the x-axis

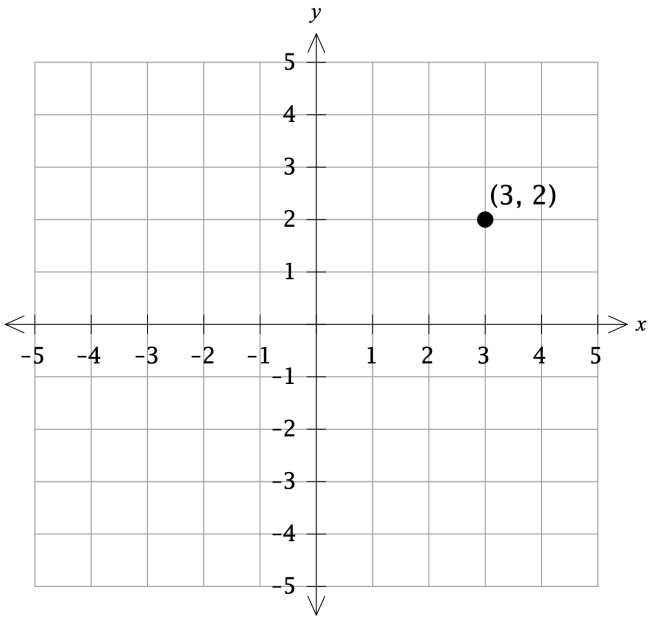
* Apply the transformations in order.

New coordinates: (1 , 2)

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Combinations of Transformations

Question 6



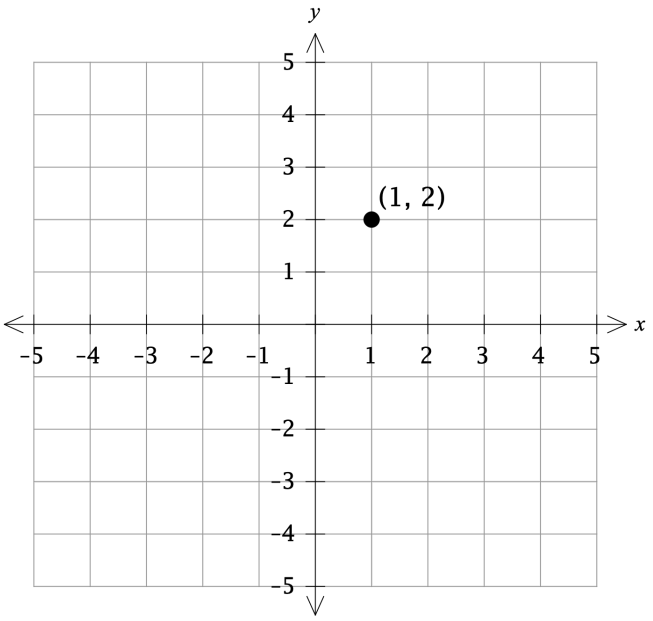
What are the new coordinates of the point $(3, 2)$ when you apply the following transformations?

1. **Reflect** in the y-axis

2. Translate **down** by 1

New coordinates: $\left(\ \square\ ,\ \square\ \right)$

Question 7



What are the new coordinates of the point $(1, 2)$ when you apply the following transformations?

1. **Reflect** in the x-axis

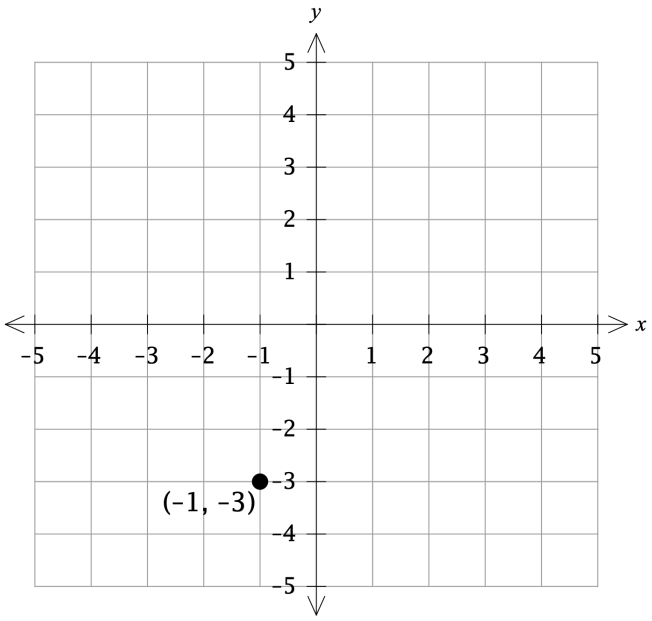
2. Translate **right** by 4

New coordinates: $\left(\ \square\ ,\ \square\ \right)$

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Combinations of Transformations

Question 8



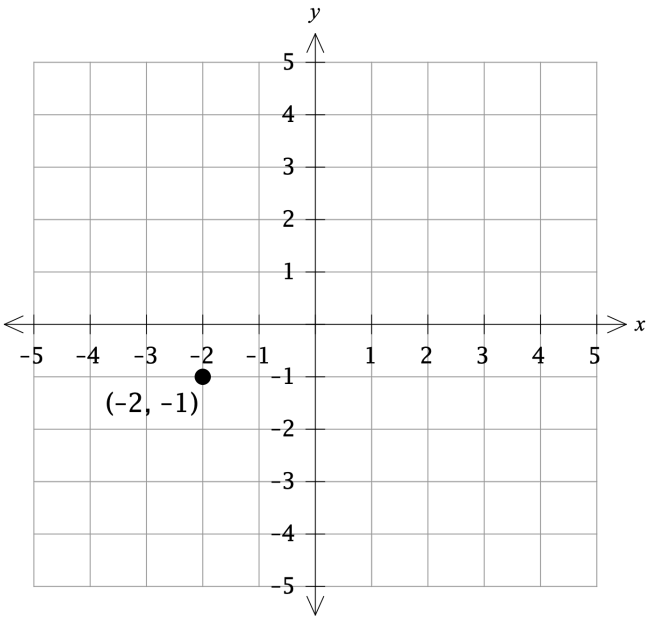
What are the new coordinates of the point $(-1, -3)$ when you apply the following transformations?

1. Translate **right** by 3

2. **Reflect** in the x-axis

New coordinates: $\left(\square, \square\right)$

Question 9



What are the new coordinates of the point $(-2, -1)$ when you apply the following transformations?

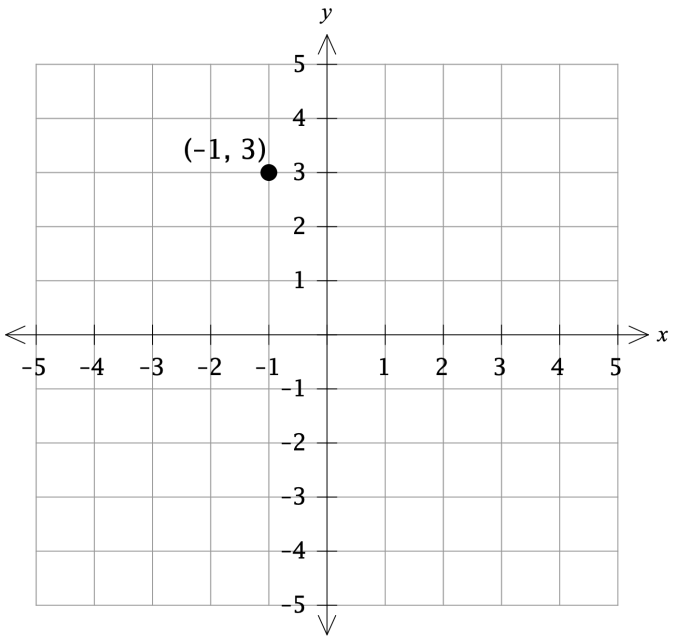
1. Translate **down** by 3

2. **Reflect** in the y-axis

New coordinates: $\left(\square, \square\right)$

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Question 10



What are the new coordinates of the point $(-1, 3)$ when you apply the following transformations?

1. Translate **left** by 1

2. **Reflect** in the x-axis

New coordinates: $\left(\square, \square\right)$

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