# Coordinate Grids

# IXL Skills to Practice

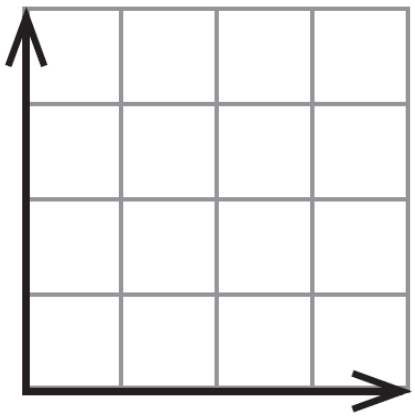
## Level H - Coordinate Plane

V.1 Objects on a coordinate plane

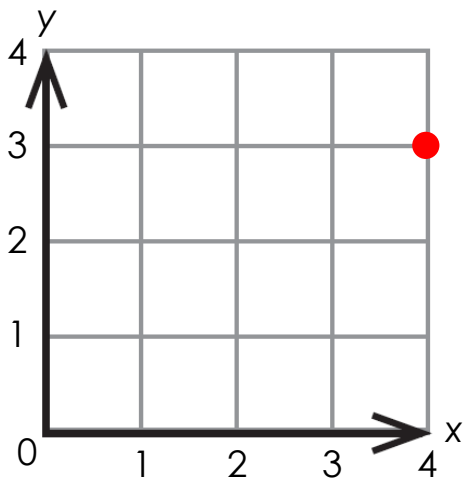
V.2 Graph points on a coordinate plane

V.3 Quadrants

In geometry, we use grids with number lines that always meet at 0. This is the coordinate grid.



Identify the ordered pair.




Its coordinates are: x = ____ y = ____

Exercises:

Rewrite the coordinates of the point as x = ___, y = ___.

a) (2, 1)

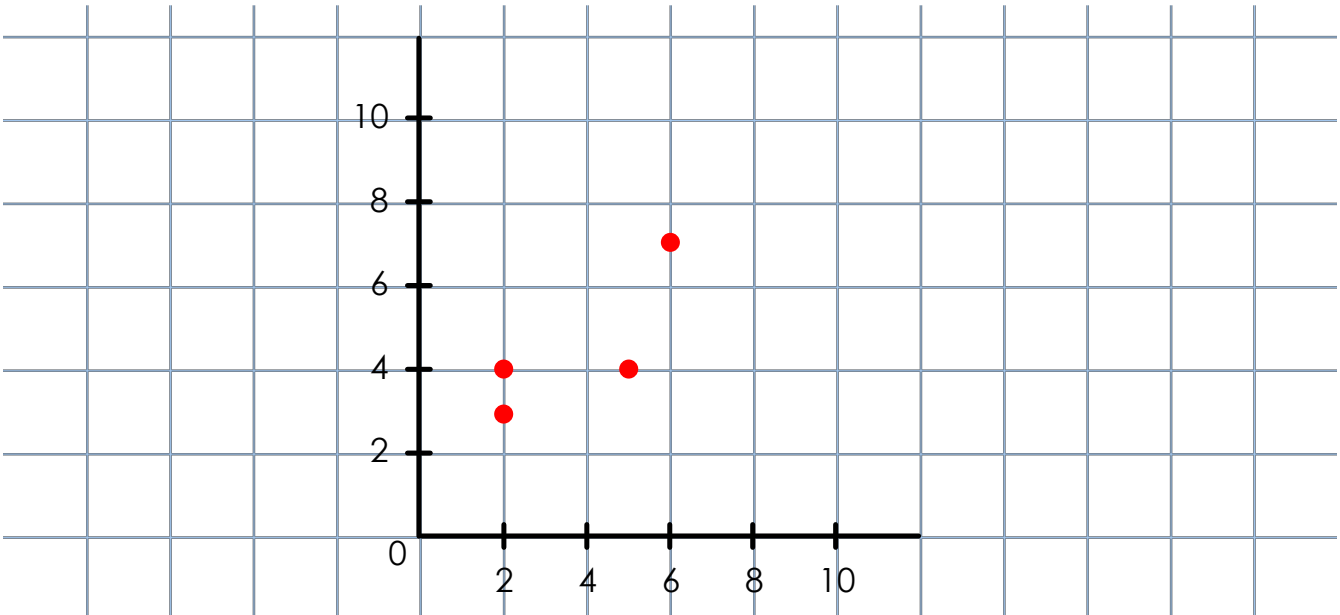
b) (1, 3)

c) (4, 2)

d) (3, 4)

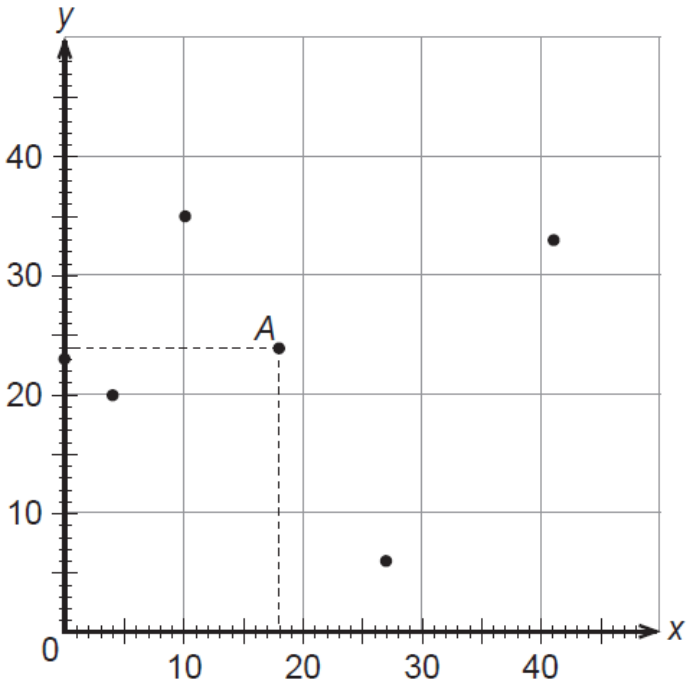
**Hint: x before y**

Sometimes, axes skip count by 2s. What are the coordinates of these points?




**Hint what numbers are in between 2 and 4 and 6 and 8?**

What are the coordinates of point A?

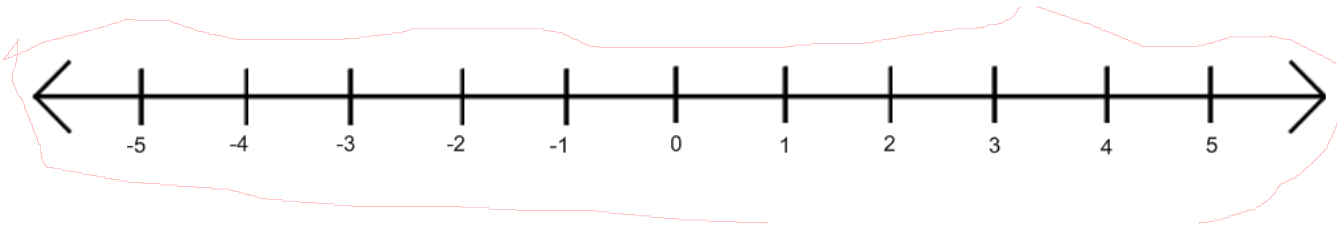



*B* (10, 35) *C* (4, 20) *D* (27, 6) *E* (41, 33) *F* (0, 23)

**Hint count the little lines that represent ones to figure it out and remember x before y.**

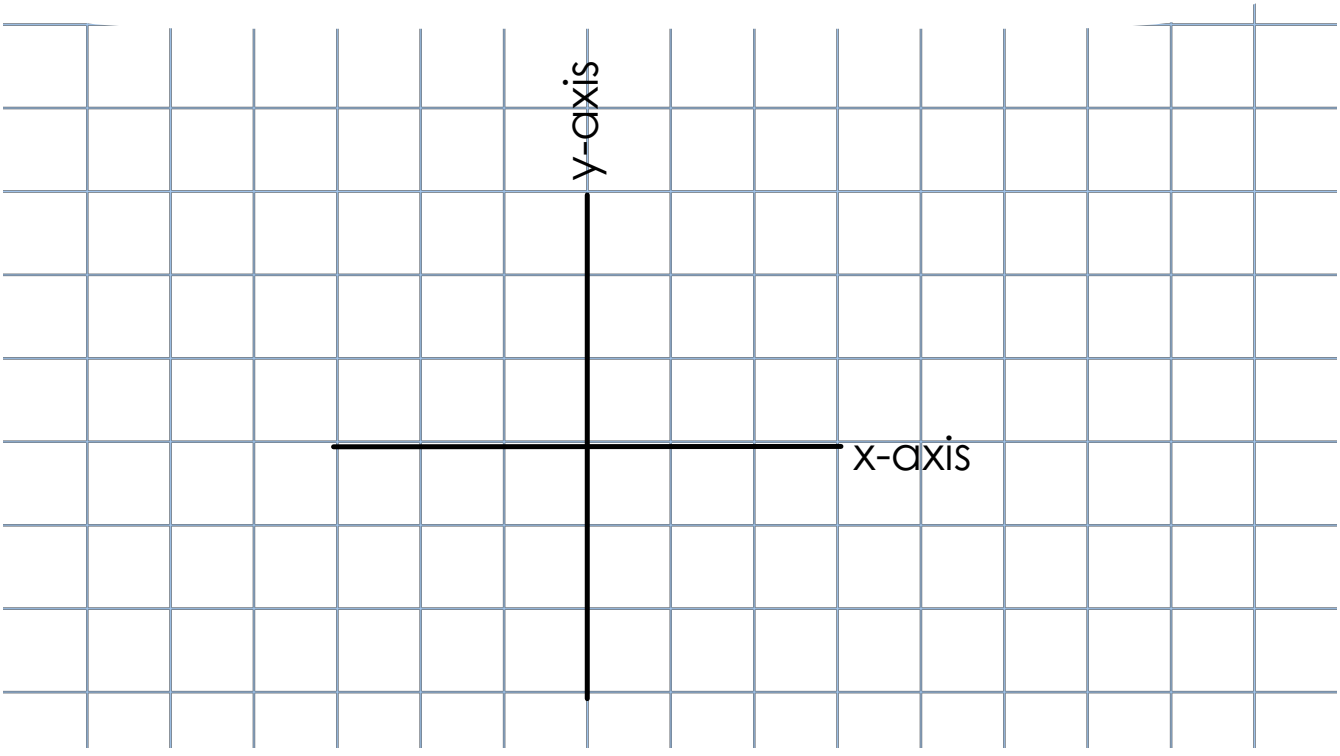
# Cartesian Planes and Quadrants

Remember:
Number lines can extend in both directions.

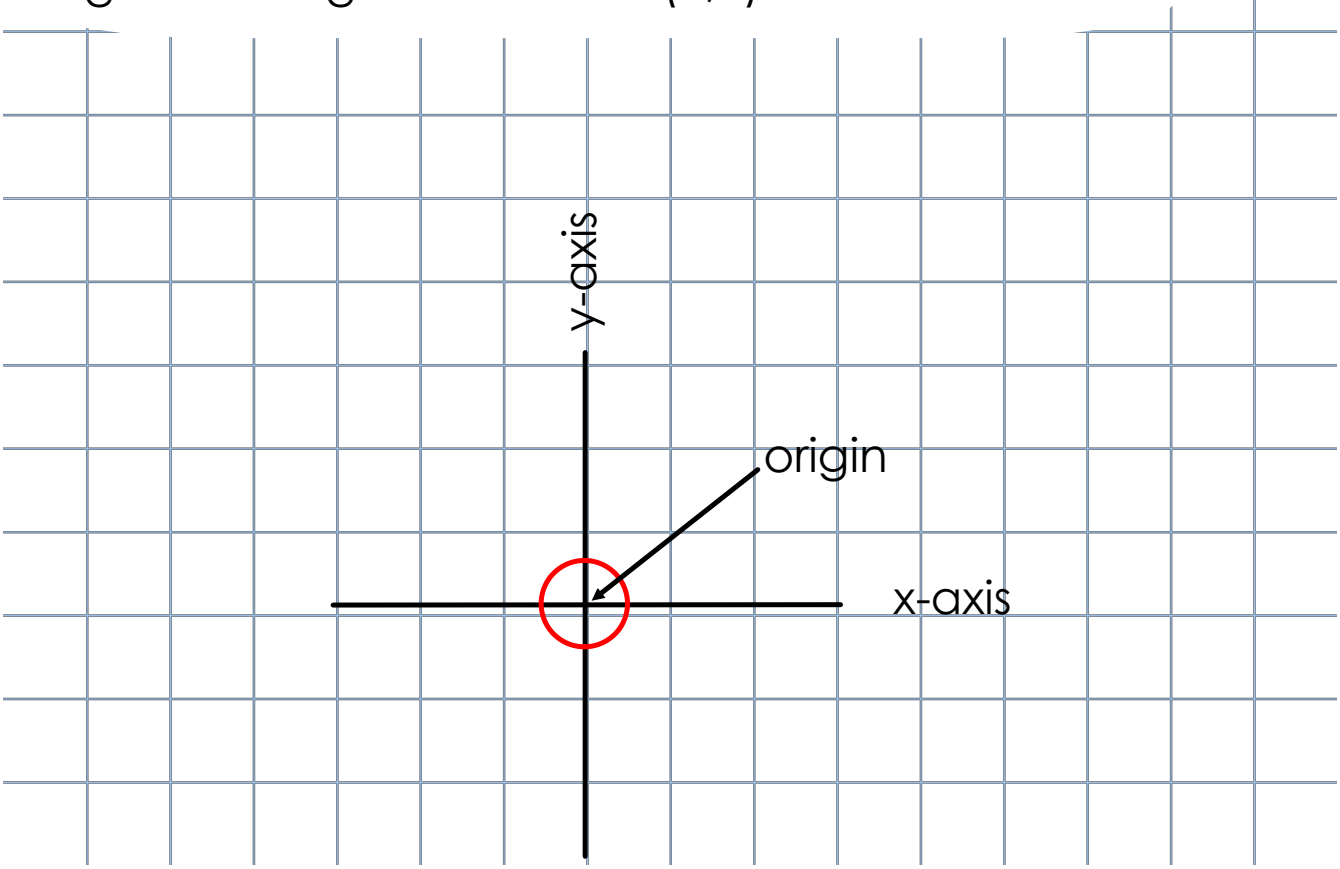


Each line in a coordinate system is called an axis. (The plural of axis is axes.) The horizontal line is called the x-axis and the vertical line is called the y-axis.

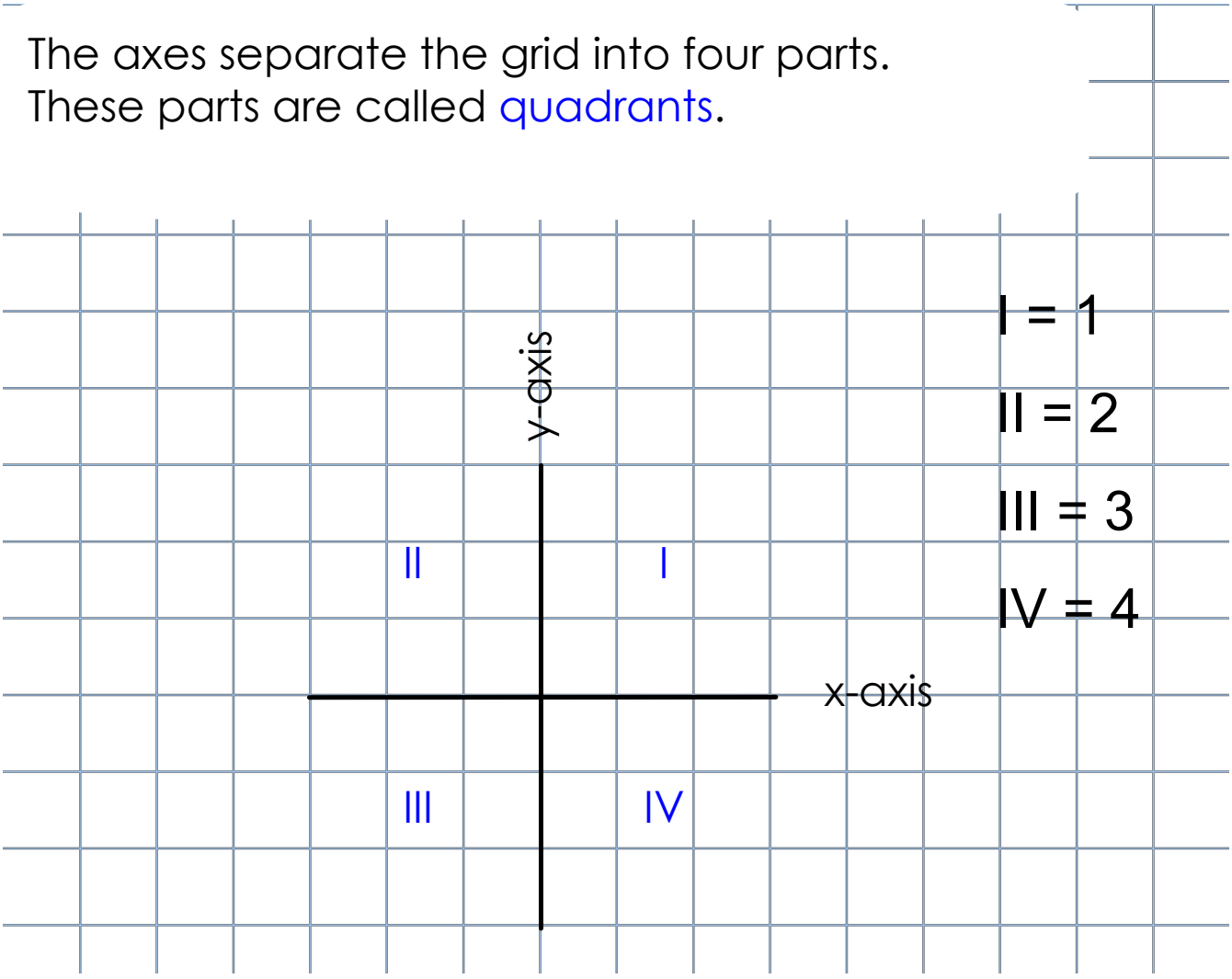
The coordinate system below is called a Cartesian Plane



The point at which the 2 axes intersect is called the origin. The origin is noted as (0,0).



The axes separate the grid into four parts.
These parts are called quadrants.



Think about:

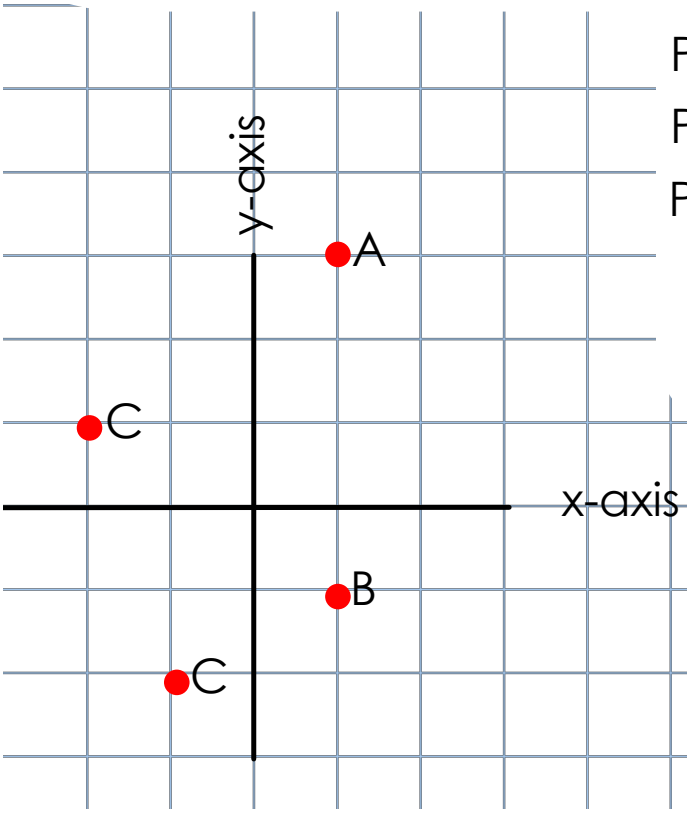
Which quadrant is the point in?

Point A is in quadrant ___.

Point B is in quadrant ___.

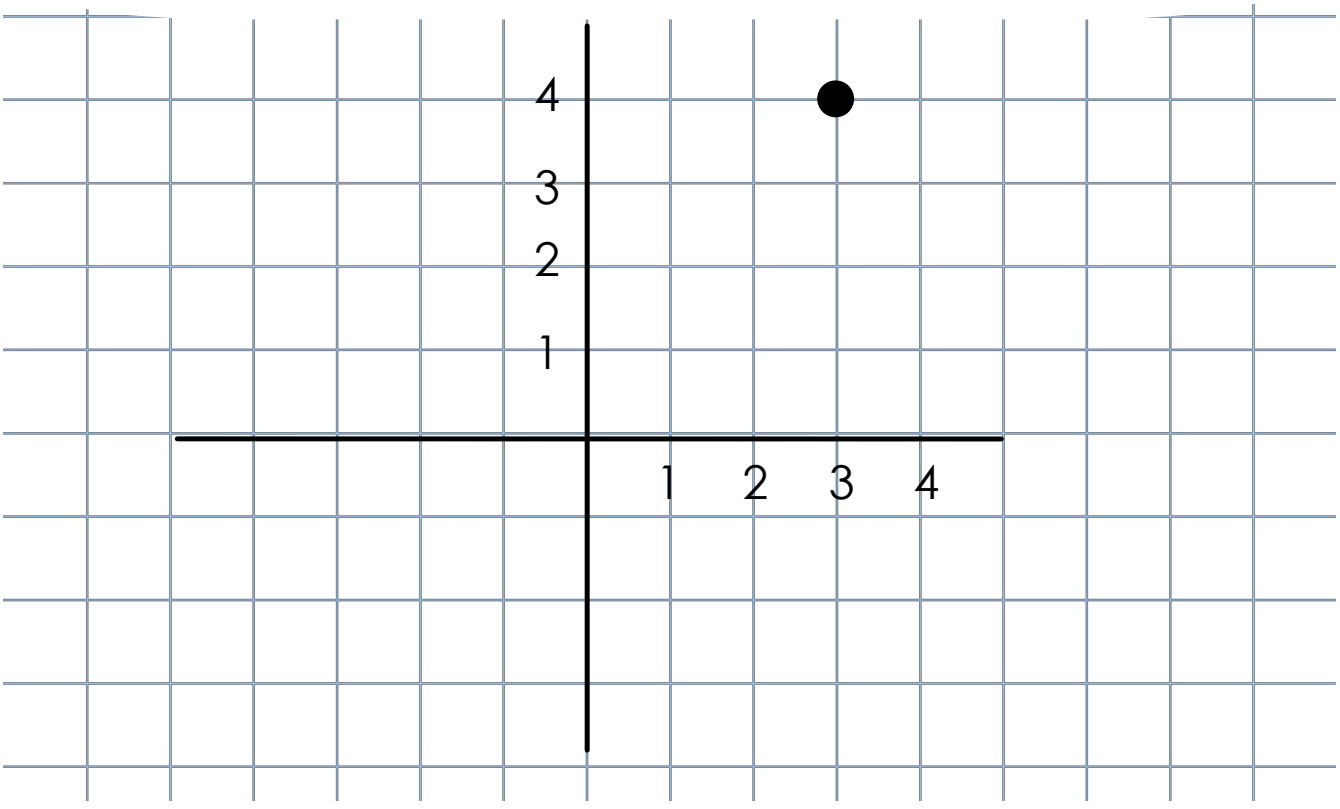
Point C is in quadrant ___.

Point D is in quadrant ___.

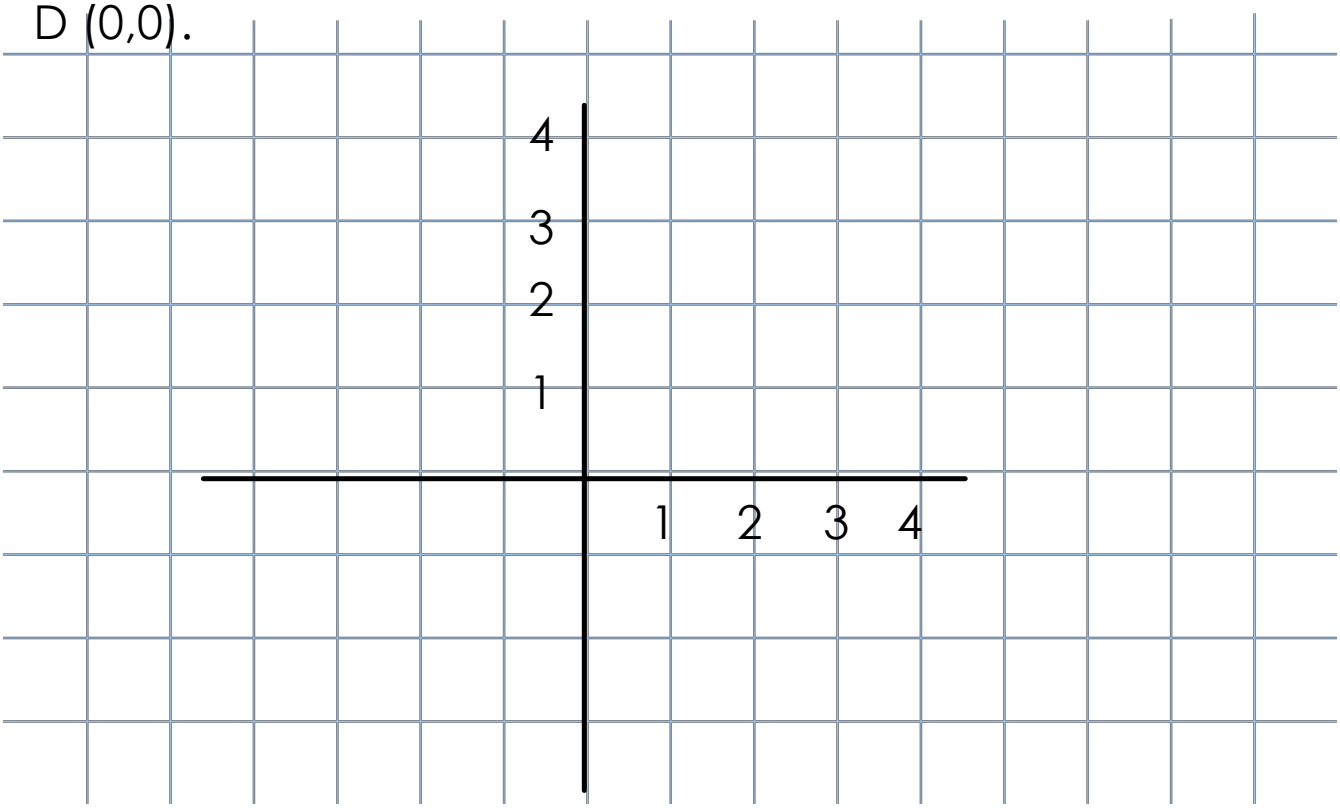


Remember:

In a coordinate pair such as (3,4), 3 is the column number and 4 is the row number.

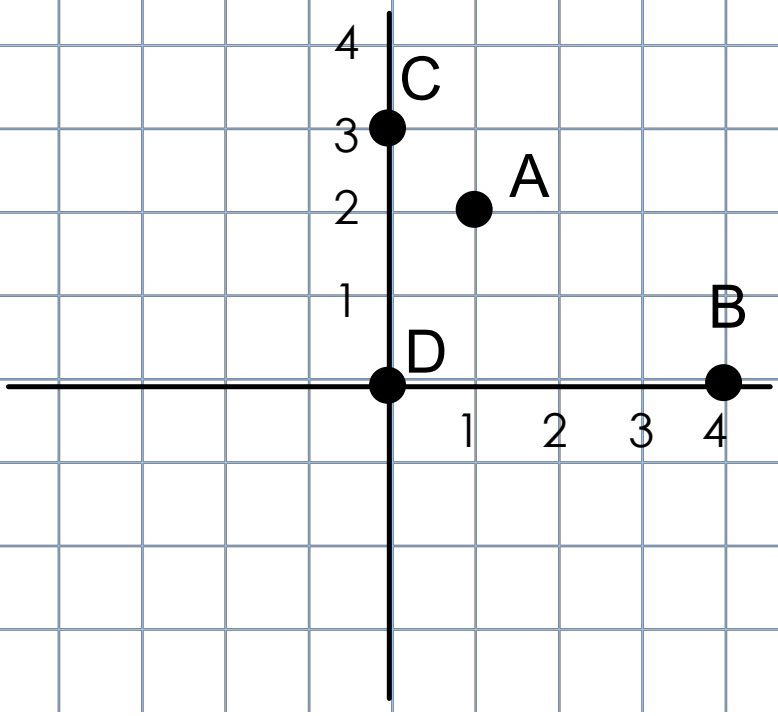


Plot the following points: A (1,2), B (4,0), C (0,3), D (0,0).



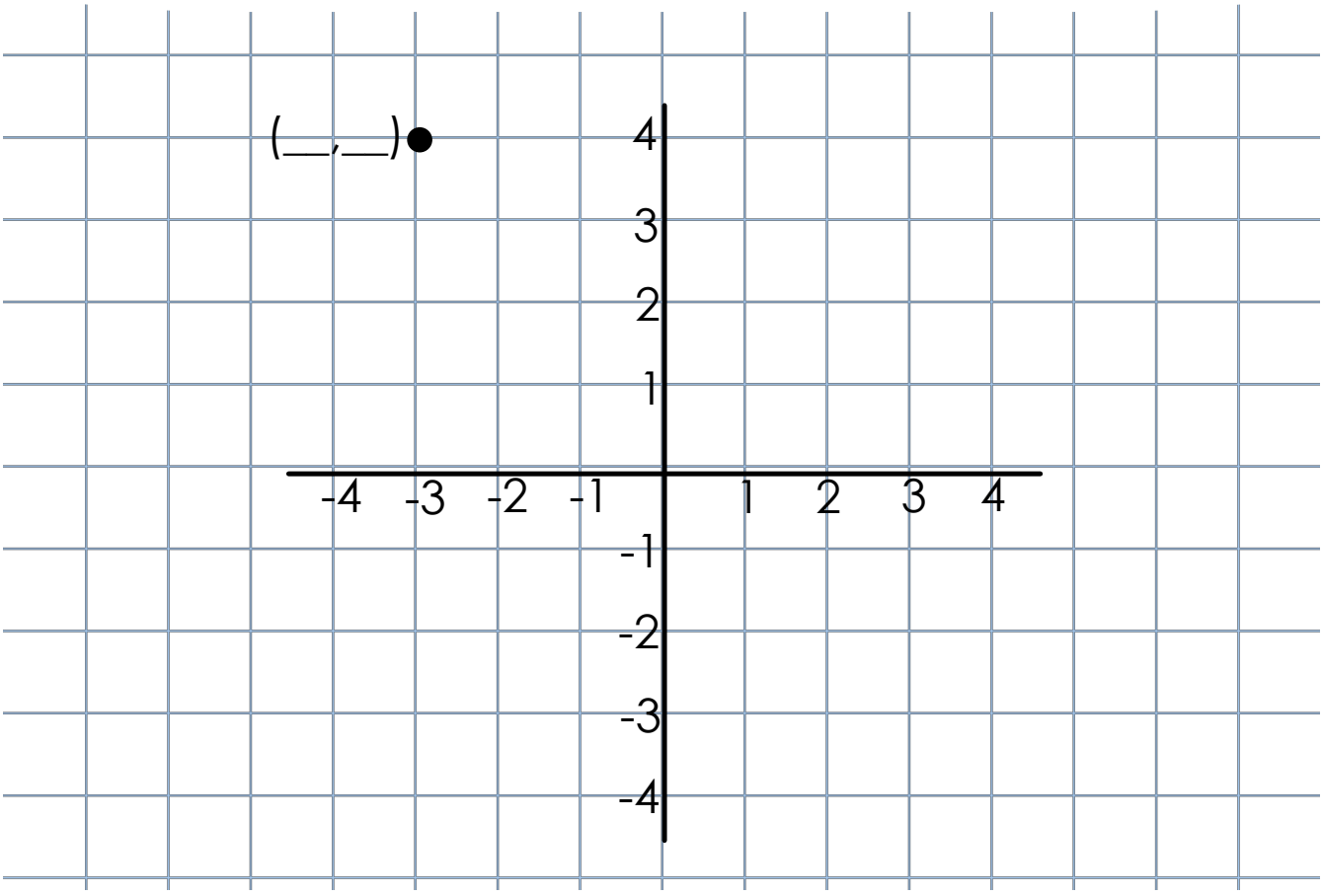
# Answers

Plot the following points: A (1,2), B (4,0), C (0,3), D (0,0).



Think about:

What are the coordinates of the given point?



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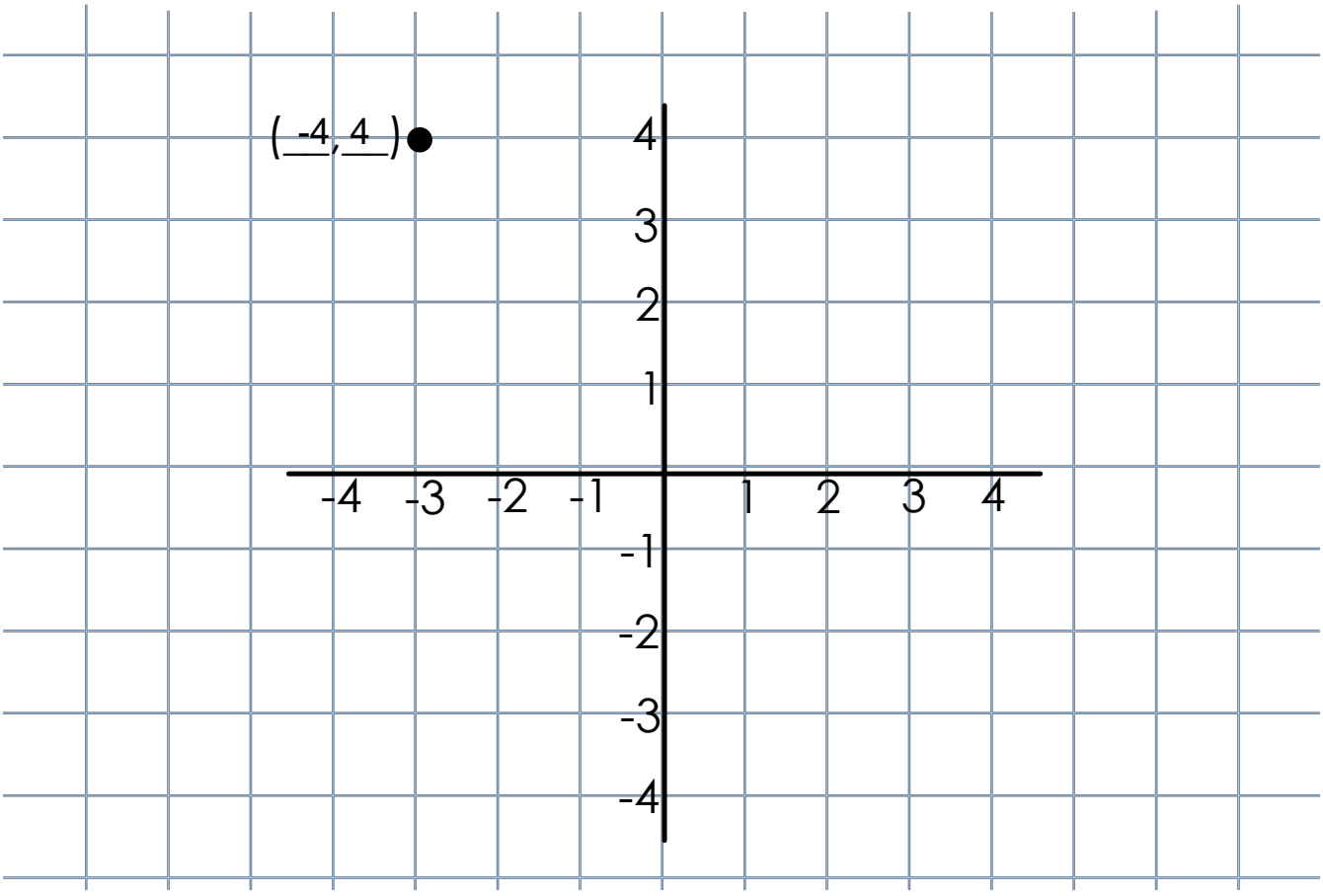

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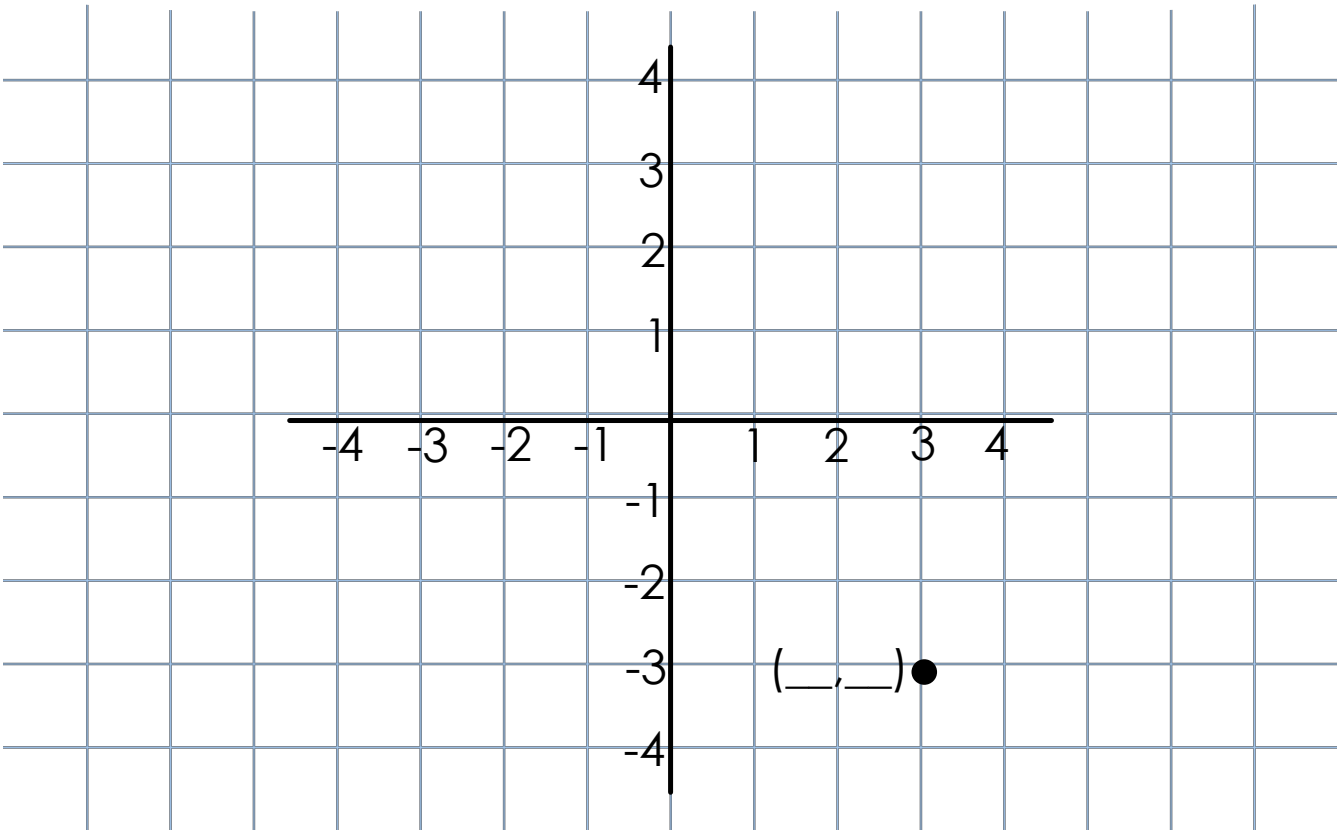

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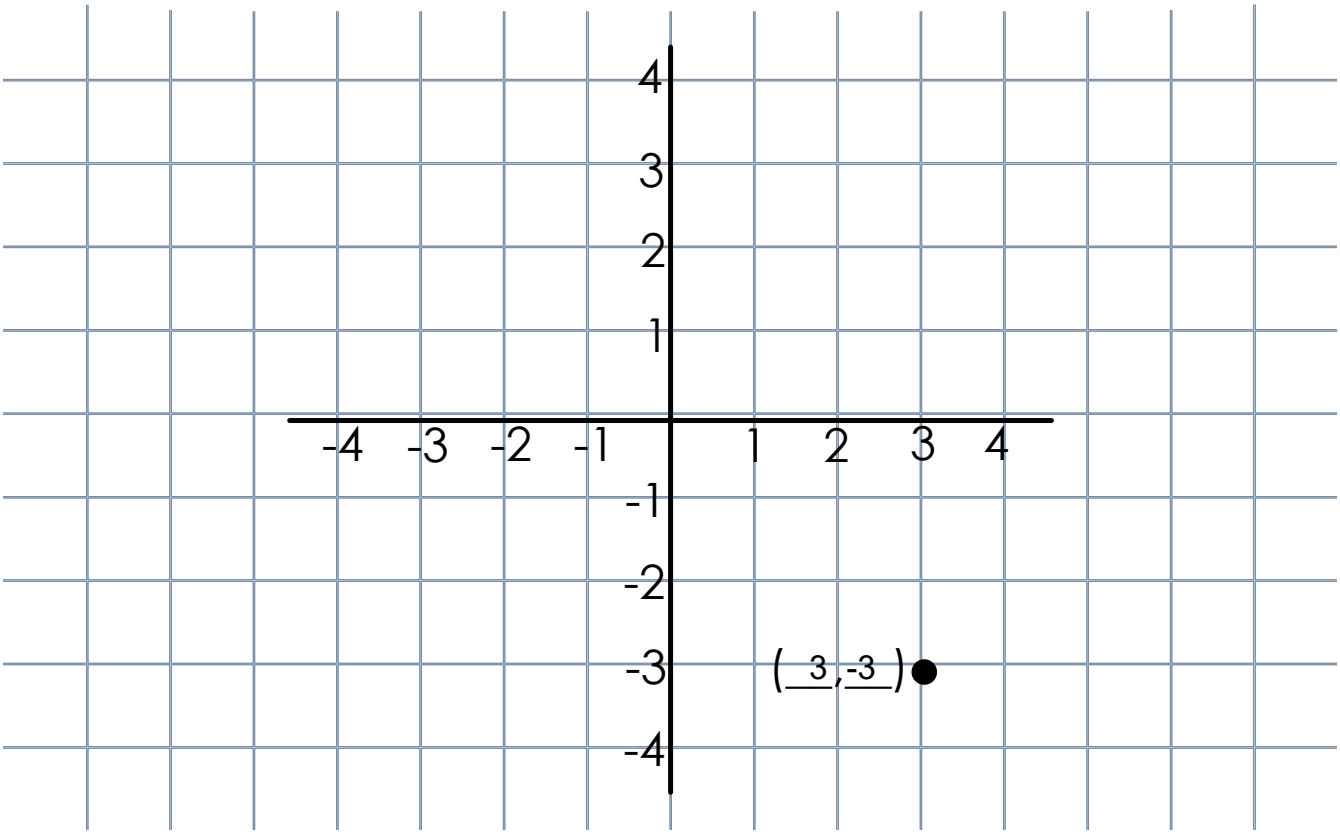
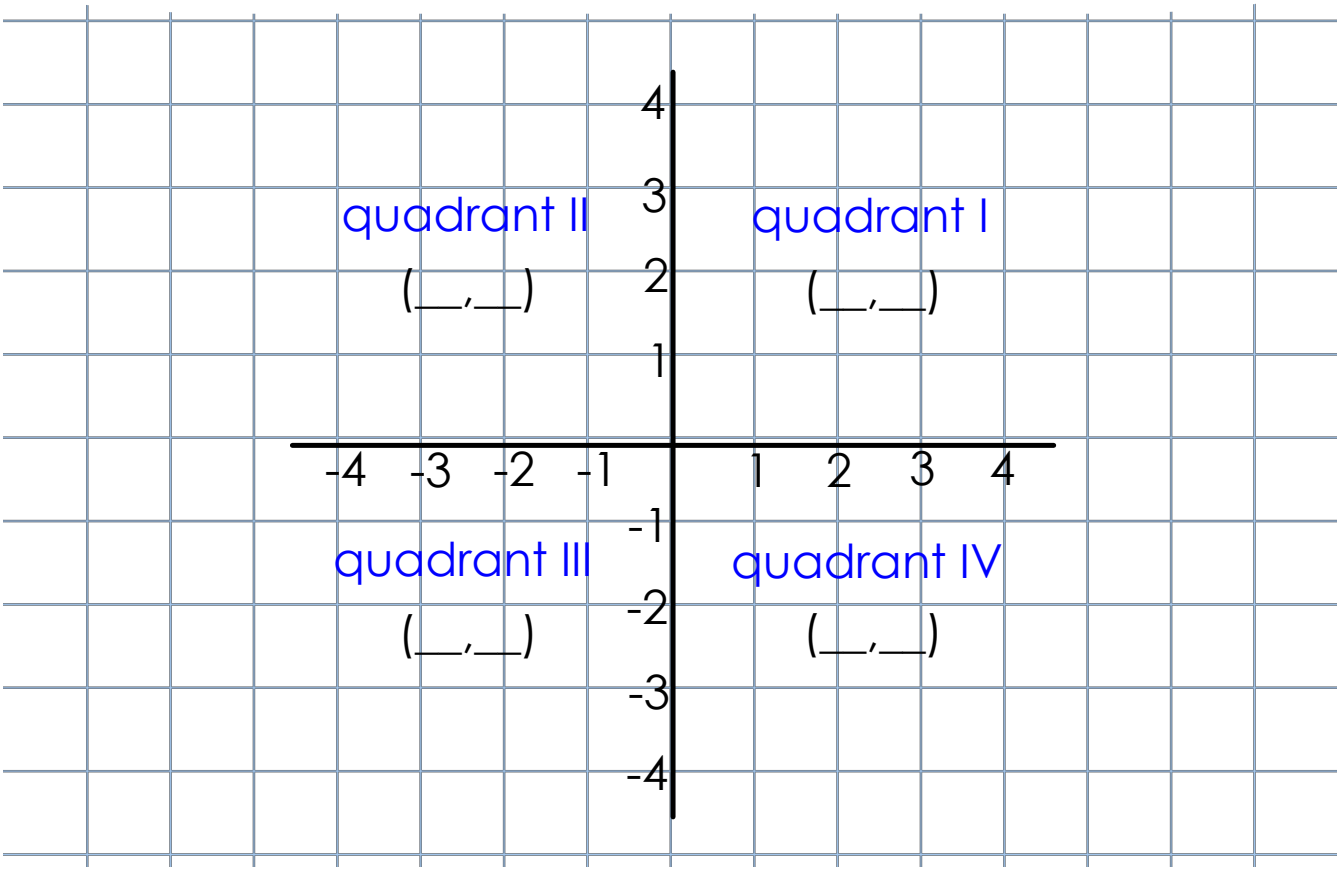
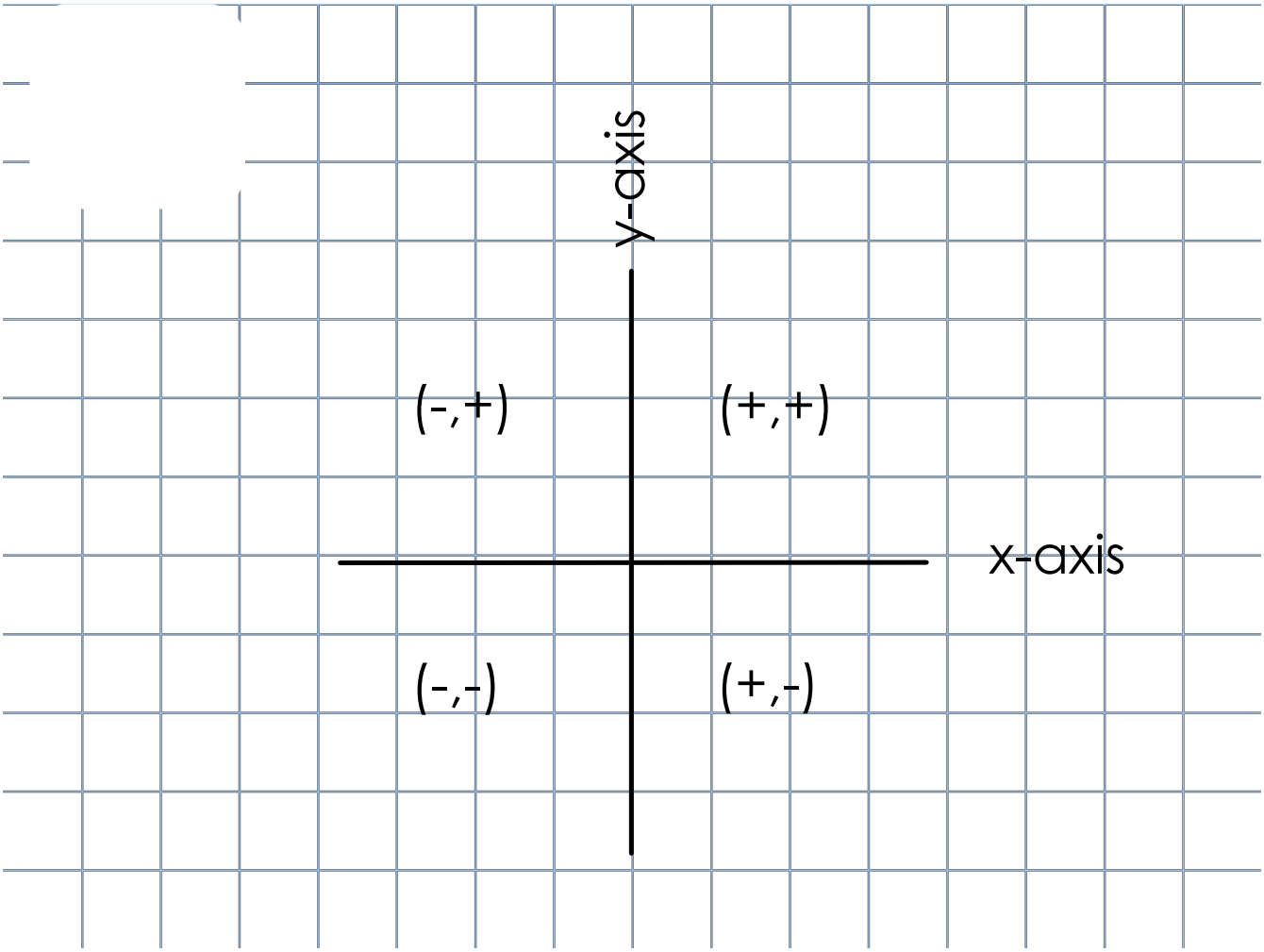


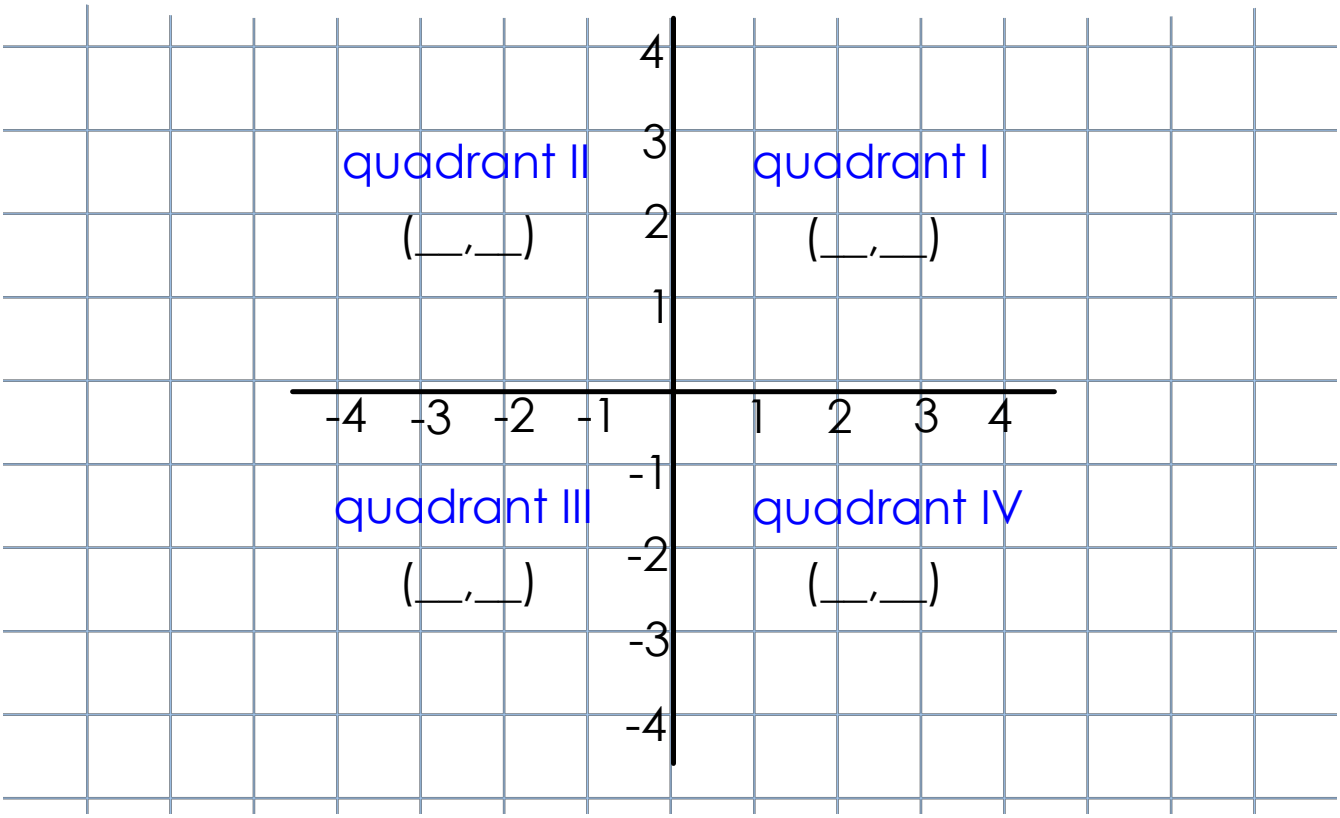
What are the signs (+positive or -negative) for each quadrant?




y-axis
(-,+)
(+,+)
x-axis
(-,-)
(+,-)

In which quadrant would the following points appear?

(-3,2), (4,-6), (-2,-2)



Name the coordinates of the following points.