

Class Work:

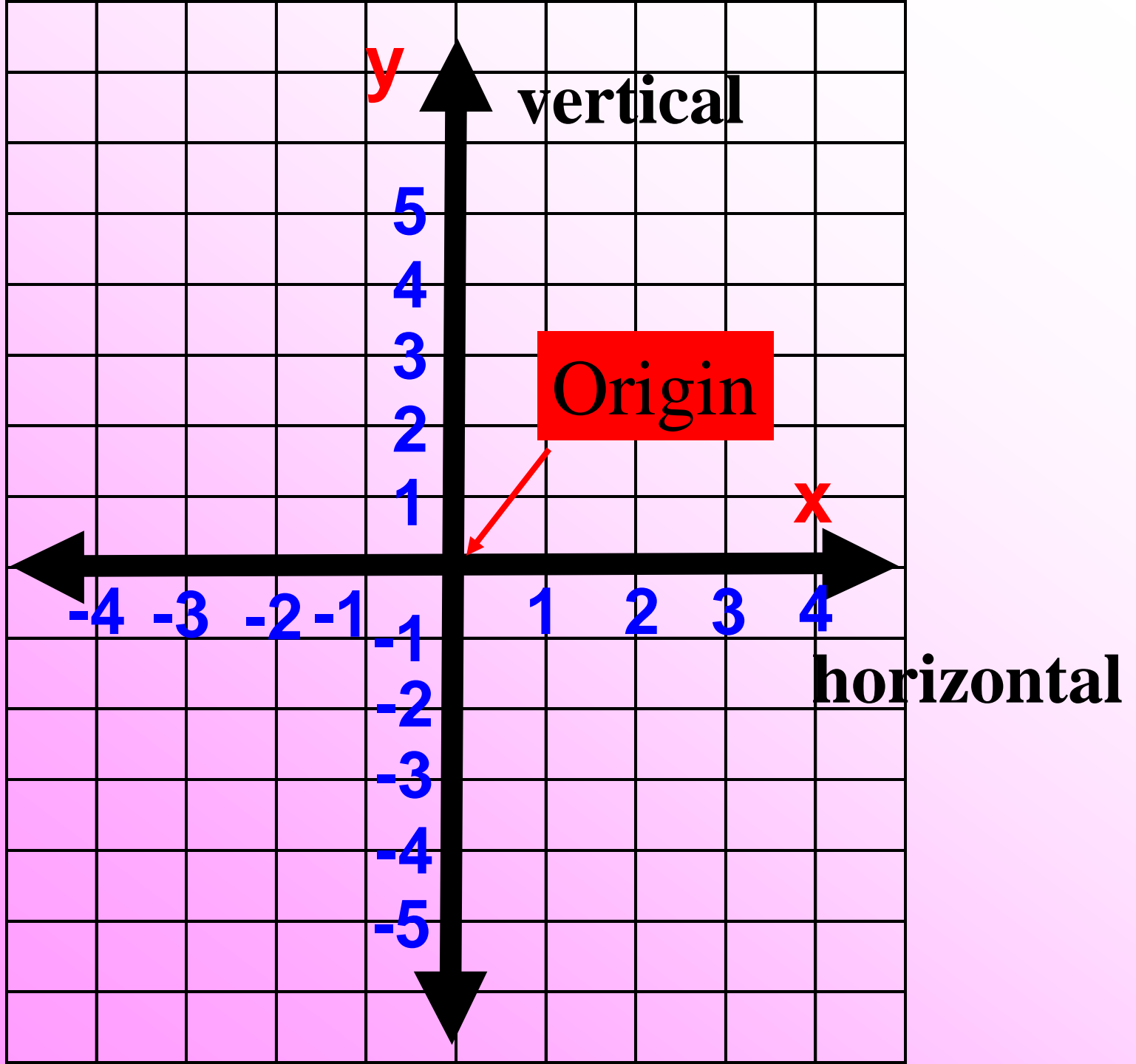
Similar Figures & Coordinate Plane

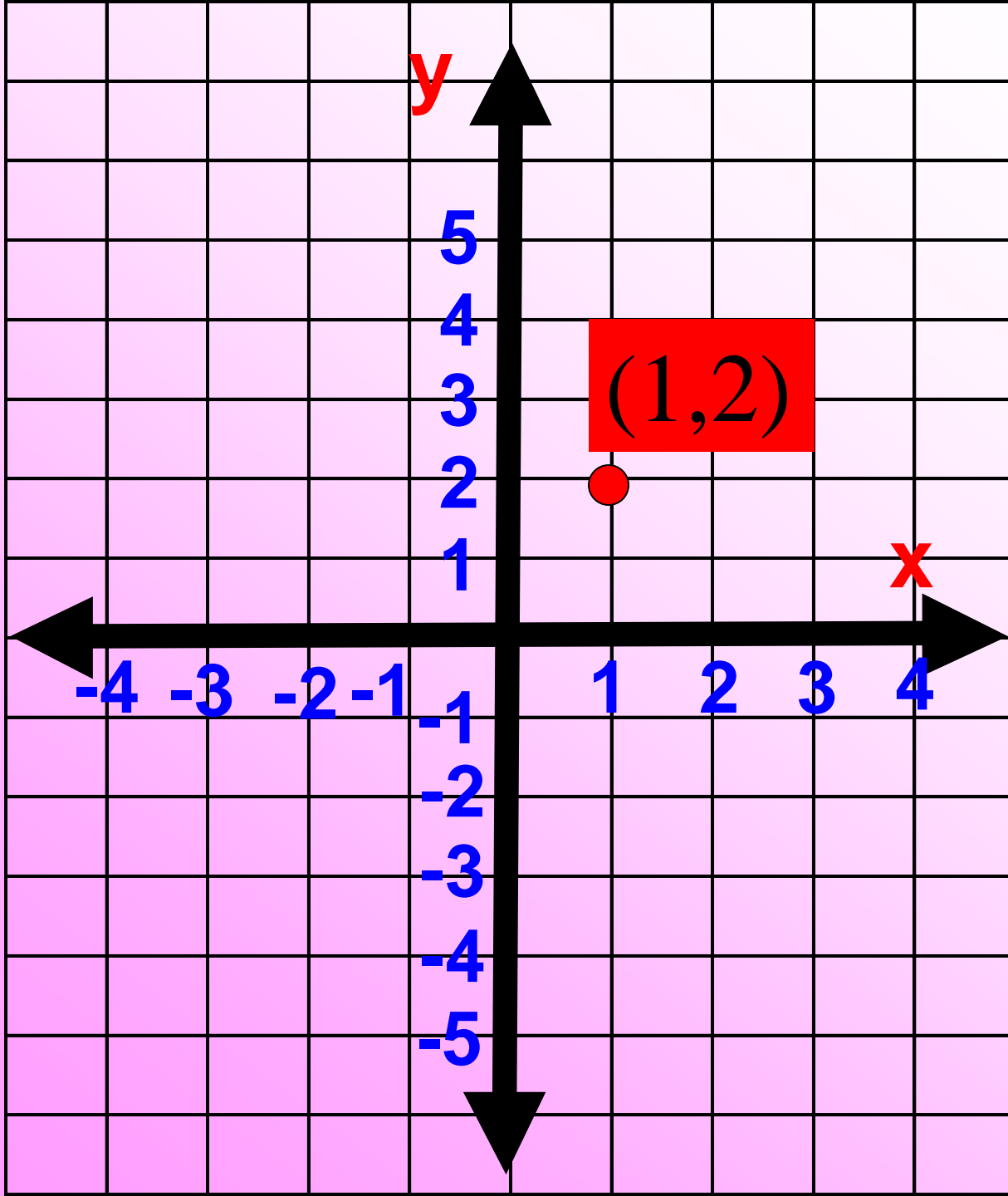
You need your notes. Title the paper:
Similar Figures and Coordinate Plane

You also need a coordinate plane board
and dry erase marker.

I will check your work at the end of
class.





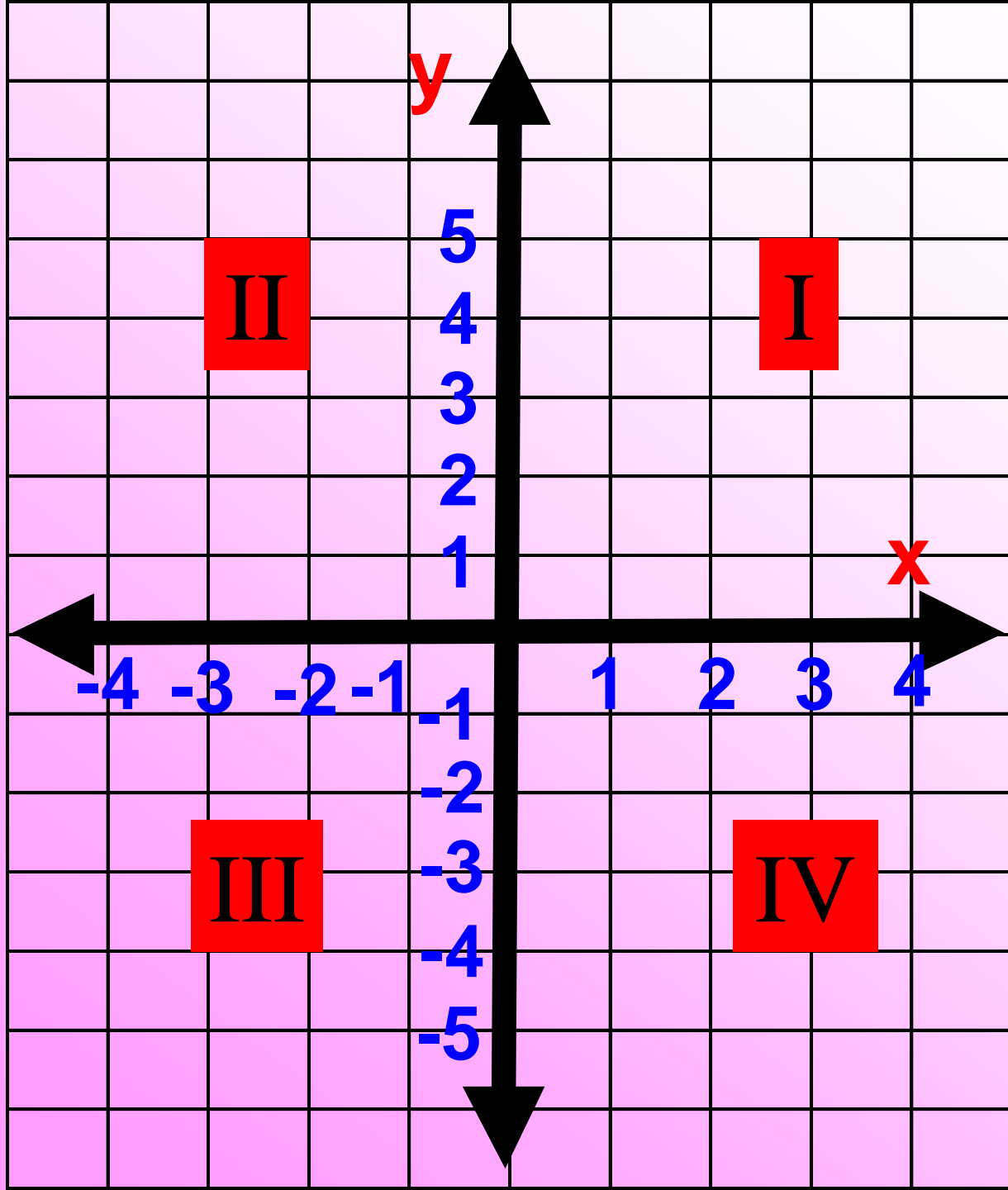


**Ordered
pair**

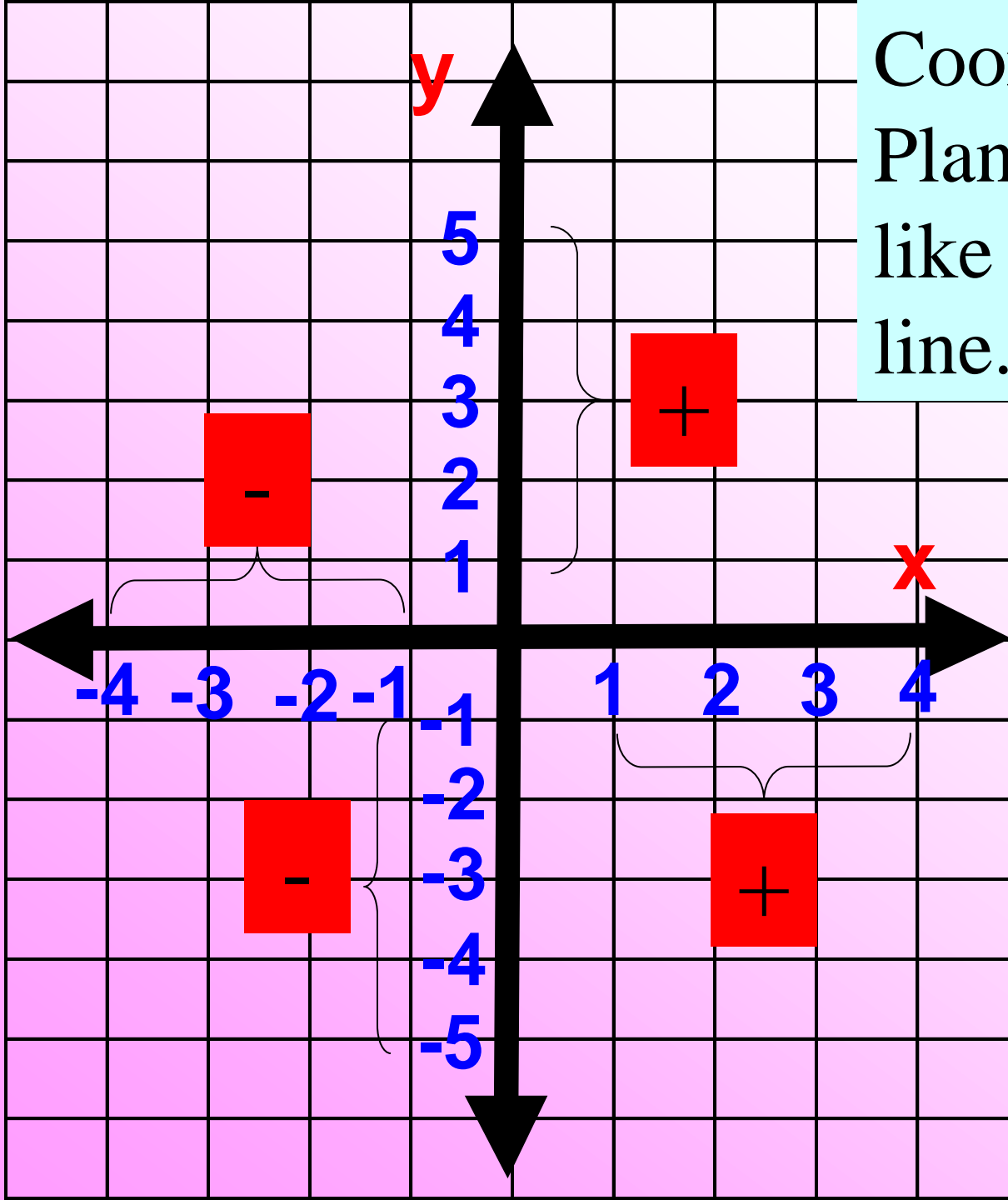
(x,y)

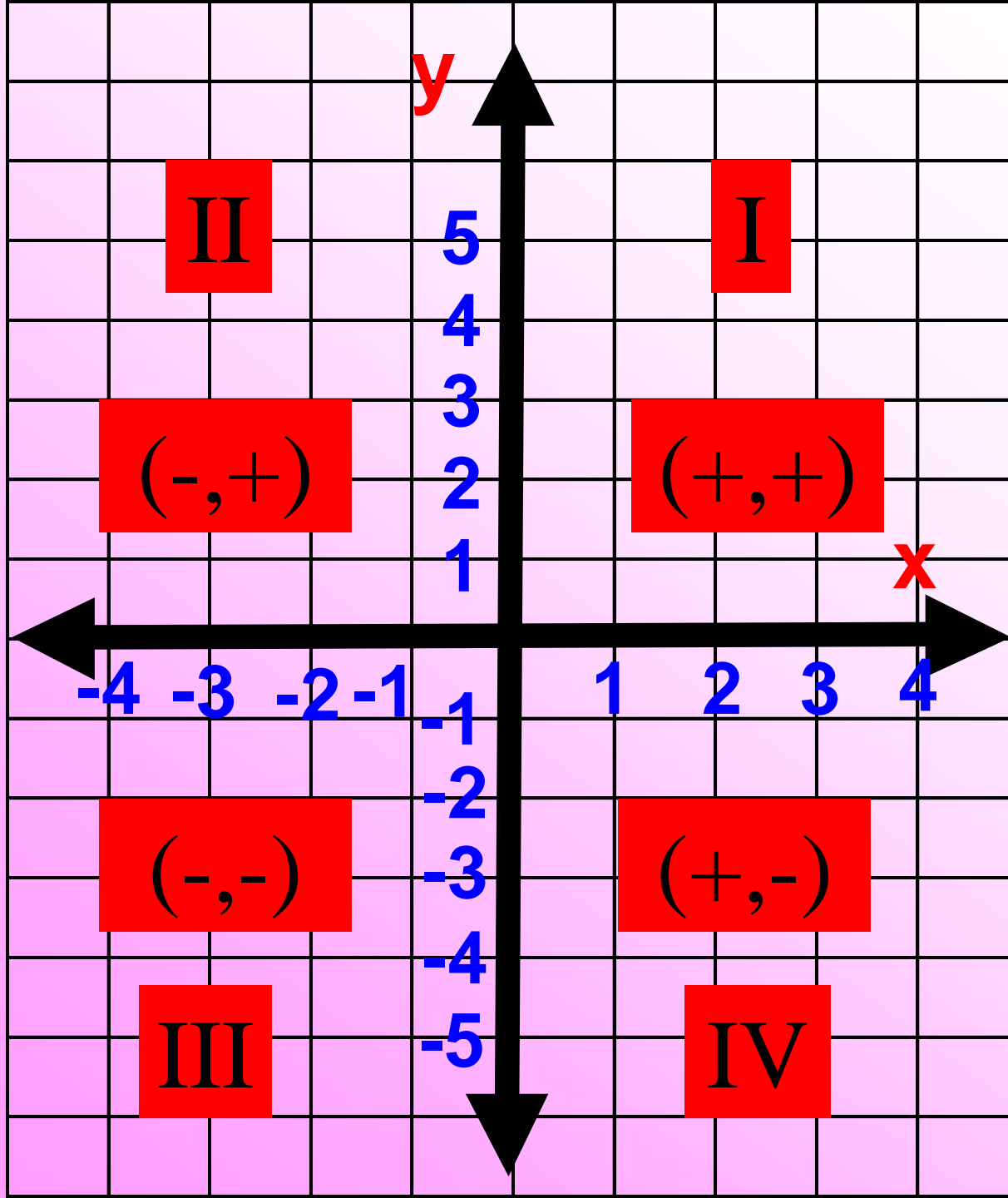
4

Quadrants

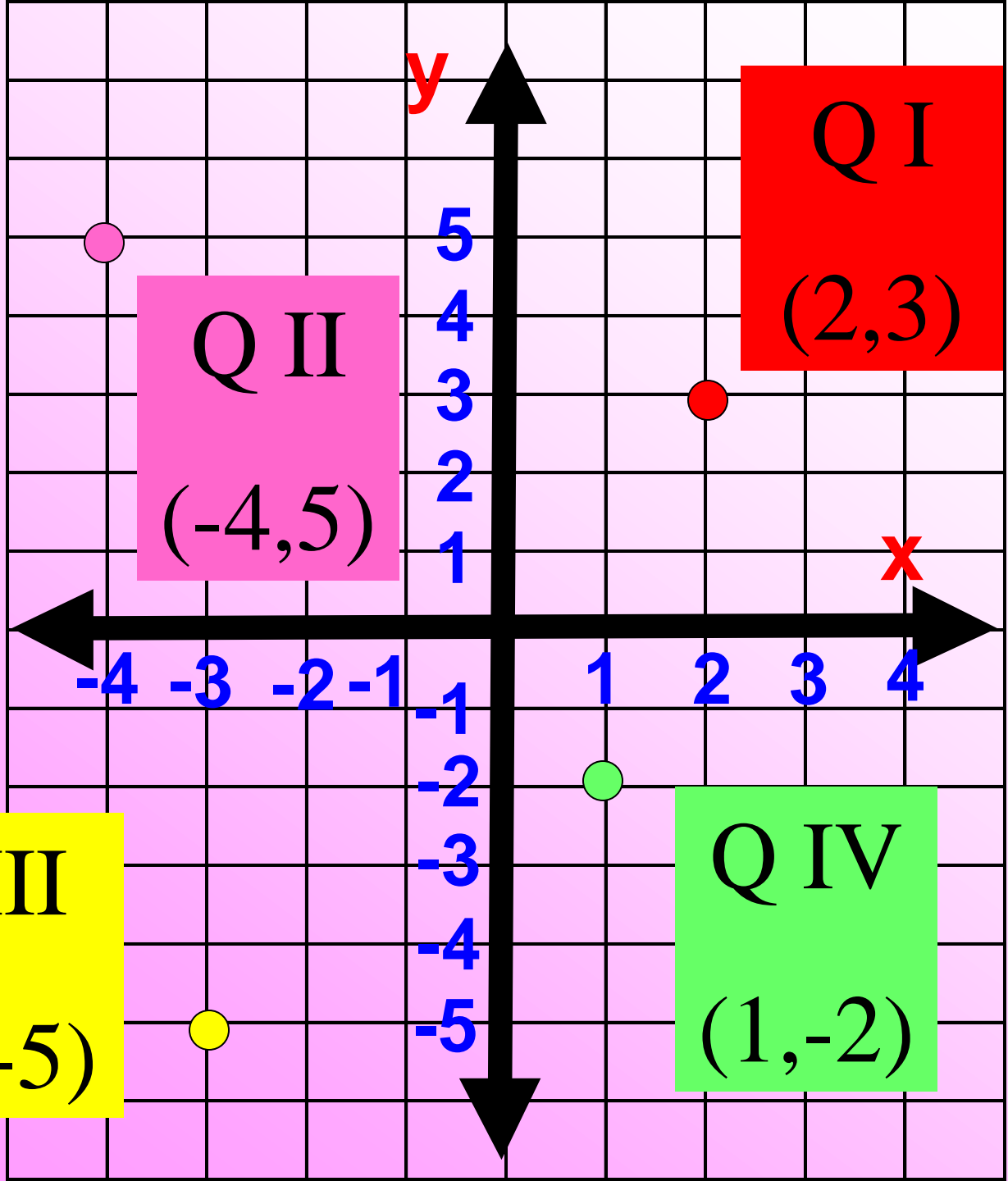


Coordinate Plane is just like a number line.





Identify the Quadrant and ordered pair for each point.



Similar Figures

Plot these points on a coordinate grid.

A(1,2) B(3,2) C(3,4) D(1,4)

What type of figure is formed?

Perfect Square

What are the dimensions?

2x2

What is the area?

4 units²

What is the perimeter?

8 units

Similar Figures

On the same grid, plot these points.

F(2,4) G(6,4) H(6,8) J(2,8)

What type of figure is formed?

Perfect Square

What are the dimensions?

4x4

What is the area?

16 units²

What is the perimeter?

16 units

Similar Figures

Compare Figure ABCD with Figure FGHIJ.

What type of dilation occurred?

Enlargement

What is the scale factor? **2**

How does the area of FGHIJ compare to the area of ABCD?

4 times larger

How does the perimeter of FGHIJ compare to the perimeter of ABCD?

2 times larger

Similar Figures

On a grid, plot a square with an area of 36 units².

What are the dimensions?

6x6

$$\sqrt{36} = 6$$

What is the perimeter?

24 units

Similar Figures

On the same grid, plot a square with an area of 9 units².

What are the dimensions?

3x3

$$\sqrt{9} = 3$$

What is the perimeter?

12 units

Similar Figures

Compare the two figures.

What type of dilation occurred?

reduction

What is the scale factor? **$\frac{1}{2}$**

How does the area of the second figure compare to the area of the first figure?

$\frac{1}{4}$ the size

How does the perimeter of the second figure compare to the perimeter of the first figure?

$\frac{1}{2}$ the size

Similar Figures

On a grid, plot a square with an area of 25 units².

What are the dimensions?

5x5

$$\sqrt{25} = 5$$

What is the perimeter?

20 units

Similar Figures

On the same grid, plot a square with an area of 100 units².

What are the dimensions?

$$10 \times 10 \quad \sqrt{100} = 10$$

What is the perimeter?

40 units

Similar Figures

Compare the two figures.

What type of dilation occurred?

enlargement

What is the scale factor? **2**

How does the area of the second figure compare to the area of the first figure?

4 times the size

How does the perimeter of the second figure compare to the perimeter of the first figure?

Twice the size