UNIT 9 · STANDARD 6.NS.6

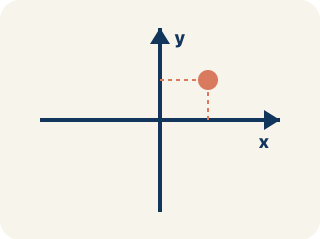
Graph on the Coordinate Plane

Lesson 9-1

Name: Type your name **Date:** Today's date **Class:** Class period

Key Vocabulary Level 2 Standard

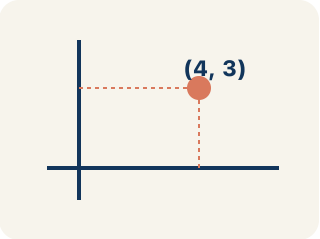
Picture first, then the word, then a plain-language meaning. Say each word out loud.



A grid with a horizontal line (x-axis) crossing a vertical line (y-axis), making four sections

Coordinate plane

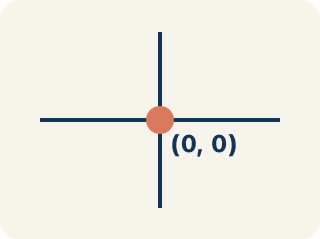
Write the definition:



(3, 5) means move right 3 from the origin, then up 5

Ordered pair

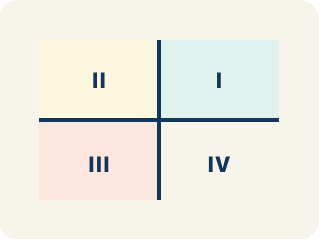
Write the definition:



The starting point at the center where both axes cross — (0, 0)

Origin

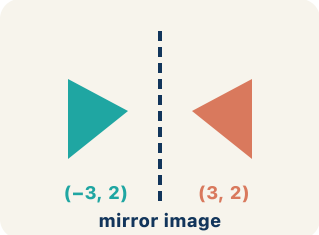
Write the definition:



I (+,+) top-right, II (-,+) top-left, III (-,-) bottom-left, IV (+,-) bottom-right

Quadrant

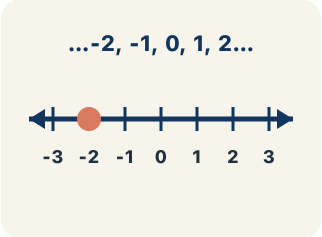
Write the definition:



(3, 2) reflected over the x-axis becomes (3, -2) — same x, opposite y

Reflection

Write the definition:



..., -3, -2, -1, 0, 1, 2, 3, ...

Integer

Write the definition:

Guided Notes Level 2 Standard

🎯 **WHAT WE'RE LEARNING TODAY**

I can plot and identify points on the coordinate plane using ordered pairs.

✏️ **Fill in each blank as we go. Use the Word Bank to help you.**

📚 **WORD BANK — FILL EACH BLANK WITH THE BEST WORD**

Coordinate plane | Ordered pair | Origin | Quadrant | Reflection | Integer

☝️ *Tap any word to see what it means and a picture.*

1. The grid made by a horizontal and a vertical number line is the _____.

2. Two numbers (x, y) that tell the location of a point are an _____.

3. The point (0, 0) where the x-axis and y-axis cross is the _____.

4. One of the four regions of the coordinate plane is a _____.

5. A flip of a point or shape over an axis is a _____.

6. A whole number or its opposite, with no fraction part, is an _____.

🧱 Watch & Try — Worked Examples

See the notes in action: watch one worked all the way through, then try the next with the same steps.

👀 I do — watch

Follow each step as your teacher solves it.

Problem: Which ordered pair names a point 3 units right and 7 units up from the origin?

A. (3, 7)

B. (7, 3)

C. (3, 3)

D. (0, 7)

Step 1 The first coordinate is horizontal (right 3), the second is vertical (up 7).

Step 2 So (3, 7).

✅ **Answer:** A. (3, 7)

🧩 Try — put the steps in order

Drag the cards (or use the ▲▼ buttons) to put the solution steps in the right order, then press **Check**.

So (3, 7).

The first coordinate is horizontal (right 3), the second is vertical (up 7).

🤝 We do — together

Solve this one with your class using the same steps.

Problem: What are the coordinates of the origin?

A. (0, 0)

B. (1, 1)

C. (0, 1)

D. (1, 0)

Step 1 _____

Step 2 _____

Answer: _____

✏️ **You do — your turn**

Now try one on your own. Show every step.

Problem: A point is at (6, 2). What does the 6 tell you?

A. Move 6 units to the right

B. Move 6 units up

C. Move 6 units to the left

D. The point is in Quadrant 6

Show your work:

Try It

Solve on your own. Check the answer key when you are done.

1. Spot 2 — The map marks the Lookout Tower at (4, 9). What does the 4 tell you to do from the origin?

A. Move 4 units to the right along the x-axis

B. Move 4 units up along the y-axis

C. Move 4 units to the left

D. Stay on the y-axis at 4

Show your work:

2. Spot 3 — Vega writes: 'The Coconut Grove is 3 across and 8 up.' Which point on the map is the Coconut Grove?

A. (3, 8)

B. (8, 3)

C. (3, 3)

D. (0, 8)

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

A student says that (3, 5) and (5, 3) are the same point because they use the same numbers. Is the student correct? Explain why or why not, and describe where each point is located on the coordinate plane.

Sentence starter: The student is ____ because (3, 5) means ____ while (5, 3) means ____. The ORDER matters because ____.

Show your work:

Reflect — Exit Ticket

Point P is located 6 units right and 3 units up from the origin. What ordered pair names point P?

A. (6, 3)

B. (3, 6)

C. (6, 0)

D. (0, 3)

Your answer: