

Lesson 3-4

Reinforce Understanding

Determine Equivalent Ratios Using Graphs

I can graph the values from a ratio table as points on the coordinate plane.

Worked model

A sticker sheet holds 7 stickers per page. Let x = pages and y = stickers.

1. Make a table. 1 page $\rightarrow$ 7 2 pages $\rightarrow$ 14 3 pages $\rightarrow$ 21
2. Write each row as an ordered pair. (1, 7) (2, 14) (3, 21)
3. Plot the points and add (0, 0) — zero pages hold zero stickers.
4. Draw one straight line through the origin and all the points.

Answer: The points (0, 0), (1, 7), (2, 14), (3, 21) lie on one straight line.

Practice

Complete each exercise. Show the reasoning that supports your answer.

1. A recipe uses 1 cup of sugar for every 2 cups of flour. Plot the ordered pairs: (1, 2), (2, 4), (3, 6).

Plot and label each point on the grid.

Show your thinking

2. A ratio table shows (2, 6), (4, 12), and (6, 18). Which ordered pair comes next if the pattern continues?

Circle the letter of the best answer. Show how you know.

- A. (7, 20)
- B. (8, 24)
- C. (8, 22)
- D. (10, 24)

Show your work

3. When you graph equivalent ratios, the points will always form what shape?

Circle the letter of the best answer. Show how you know.

- A. A curved line
- B. A straight line through the origin
- C. A zigzag
- D. A circle

Show your work
