# Determine Equivalent Ratios Using Graphs

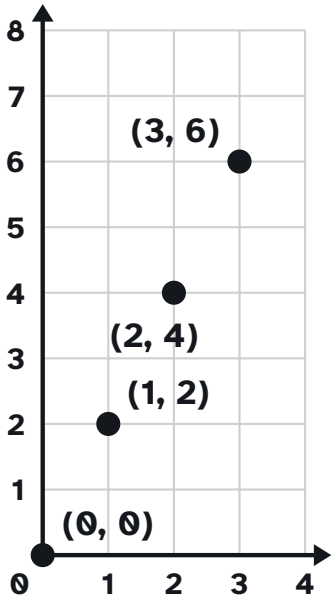
Graph the pairs from a ratio table as points on the coordinate plane.

**Name** _____ **Date** _____

### Tonight's spark

A sundae stand uses 2 ounces of sauce for every sundae. A helper makes a grid: sundaes go across, ounces go up. Dots for 1, 2 and 3 sundaes go on it. What shape will the dots make?

**Make a guess first: will the dots line up straight, or bend?**




**Our class model: the ratio graph**

## Try it

Work it out on paper. Write one answer on each line.

**1** **A ratio table has the points (1, 3) and (2, 6). What is the next point, (3, ?)**

**A.** (3, 6) **B.** (3, 9) **C.** (9, 3) **D.** (3, 4)

**My answer** _____

**2** **To plot the point (2, 5), how do you move from the origin?**

**A.** Up 2, right 5 **B.** Right 5, up 2 **C.** Right 2, up 5 **D.** Left 2, up 5

**My answer** _____

**3** **On a ratio graph, x is tickets and y is dollars. Which point means 3 tickets cost $12?**

**A.** (3, 15) **B.** (12, 3) **C.** (9, 12) **D.** (3, 12)

**My answer** _____

**4** **Which point is the origin?**

**A.** (1, 1) **B.** (0, 0) **C.** (0, 1) **D.** (1, 0)

**My answer** _____

**5** **The points (1, 4), (2, 8) and (3, 12) are plotted. What do they look like?**

**A.** A straight line through (0, 0) **B.** A curve that bends upward

**C.** Scattered dots with no pattern **D.** A straight line that starts at (0, 4)

**My answer** _____

### Talk about it

What shape do the points make, and what point would it pass through if you kept going backward?

### Home mission

Use a sheet of paper. Its bottom edge shows sundaes and its left edge shows ounces. Say the rule: 2 ounces of sauce for every sundae. Ask your student to point to where 3 sundaes belong. Then ask: where do 0 sundaes belong?

### If we get stuck, ask

- Which number tells us to go right, and which tells us to go up?
- Does the line start at the origin, (0, 0)?
- Do all the points line up straight, or is one off the line?

**Do it on a screen**

Scan or type the link. Same lesson, with hints.

**eduwonderlab.com/lessons/3-4/homework.html**

**How did it feel? (optional)**

Tricky Getting there Got it