Answers and talk notes

Represent Rational Numbers on the Coordinate Plane

What your student is learning

Tonight we plot points on a grid called the coordinate plane. We use two numbers, called an ordered pair, to say exactly where a point goes.

Answers

Ask your student to explain before you look.

1. **A.** (0, 0). The origin is where the two lines cross, at (0, 0).
2. **B.** 4. The first number, 4, tells how far to move right.
3. **C.** (3, 5). Right comes first and up comes second, so (3, 5).
4. **D.** 7. The x-coordinate is the first number, 7.
5. **B.** (6, 1). Right depends on the first number, and 6 is greater than 2, so (6, 1) is farther right.

Talk about it

Which number tells how far to go sideways? Which tells how far to go up?

Home mission

Use the corner of the table nearest you as the origin. Slide a coin 5 finger-widths right, then 4 finger-widths away from you. Say the point: (5, 4). Now try (4, 5). Does the coin land in the same place?

When they are stuck, ask

- Where do we always start? Let's put our finger on the origin first.
- Which number is first? That one tells us how far to move sideways.
- Say the point out loud. What is each number telling us to do?

Try not to say

- Move up first, then sideways.
- The order of the two numbers does not matter.
- Just guess where the point goes.