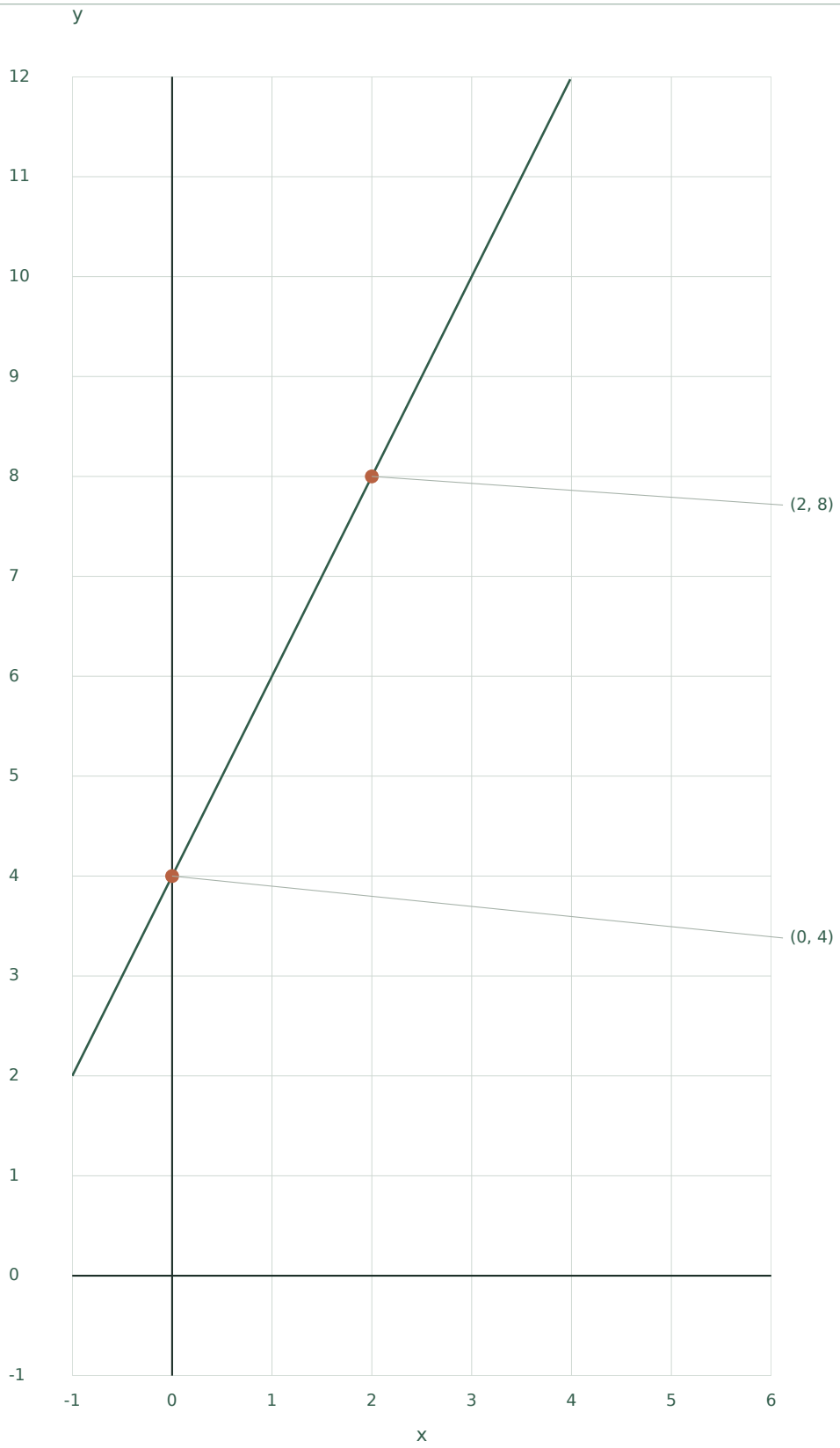
Linear Equation Vocabulary: Label the Graph and Match Terms

Worked graph



Coordinate labels sit outside the plot; thin grey leaders are annotations, not function curves.

Linear Equation Vocabulary: Label the Graph and Match Terms

Original worked example / unchanged complete key

Prompt: A diagram shows a straight line crossing the y-axis at (0, 4) and passing through the point (2, 8). Label the y-intercept, the slope, and one ordered pair. Then match the term 'coefficient' to its definition.

Answer: The y-intercept is 4, because the line crosses the y-axis at (0, 4). The slope is (8 - 4) divided by (2 - 0) = 4 divided by 2 = 2. One ordered pair on the line is (2, 8). The term 'coefficient' matches 'a number that multiplies a variable'.

Reason: The y-intercept is the y-value at the crossing point on the vertical axis. Slope is change in y divided by change in x between two points. An ordered pair lists x first and y second. A coefficient is identified by its role in multiplying a variable.

Check: Substitute the ordered pair into y = 2x + 4: 2 times 2 plus 4 equals 8, which matches the point. Confirm that 4 is the y-value at x = 0 and that 2 is the multiplier of x.