Plotting Lines from y = mx + b: Slope-Intercept Practice

Original worked example / complete source key

Prompt: Plot the line y = -2x + 3 on a coordinate grid. Identify the intercept, the rise, and the run, and give two points on the line.

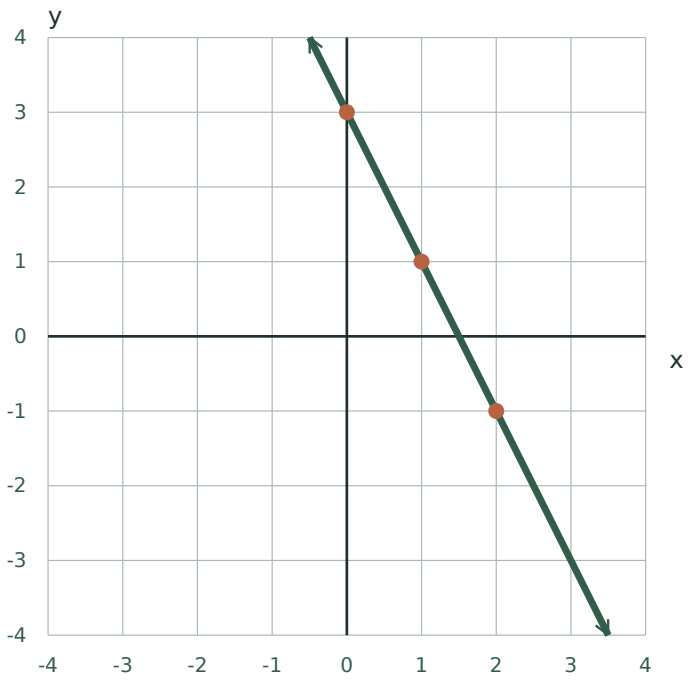
Answer: The y-intercept is b = 3, so plot (0, 3). The slope is m = -2 = -2/1, so run 1 right and rise 2 down from (0, 3) to reach (1, 1). A third point is (2, -1). Draw a straight line through (0, 3), (1, 1), and (2, -1). Check: for x = 1, y = -2(1) + 3 = 1, which matches (1, 1).

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Worked example / completed source graph

Plot the line y = -2x + 3 on a coordinate grid. Identify the intercept, the rise, and the run, and give two points on the line.

Line 1 (solid green): y = -2x + 3



A complete line continues beyond this display window; arrowheads show continuation.

Marked point: (0, 3).
Marked point: (1, 1).
Marked point: (2, -1).

Horizontal interval = 1; vertical interval = 1. This is a display window, not a new domain.