Algebra Lab: Matching Graphs, Points, and Slopes

Worked example / complete source key

A graph card shows a line passing through (1, 2) and (4, 8). A point card reads (7, 14). A slope card reads 2. Show that these three cards form a triple.

Answer: Slope from (1, 2) to (4, 8): change in y is 8 minus 2 equals 6; change in x is 4 minus 1 equals 3; slope is 6 divided by 3 equals 2. Check the point (7, 14) from (1, 2): change in y is 14 minus 2 equals 12; change in x is 7 minus 1 equals 6; slope is 12 divided by 6 equals 2. Both calculations give 2, so the graph, point, and slope card match.