

Fit Equation Lab Answer Key

Accept equivalent pairs of points taken from each best-fit line.

1. Example points: (0, 0), (4, 8). Slope = 2. Equation: $y \approx 2x$.
2. Example points: (0, 10), (4, 2). Slope = -2. Equation: $y \approx -2x + 10$.
3. Example points: (0, 2), (4, 10). Slope = 2. Equation: $y \approx 2x + 2$.
4. Example points: (0, 10), (4, 2). Slope = -2. Equation: $y \approx -2x + 10$.
5. Example points: (0, 0), (4, 8). Slope = 2. Equation: $y \approx 2x$.

Teacher's Guide

- Remind students to select convenient points on the best-fit line, not necessarily points from the original scatter data.
- Have students calculate slope using the change in y divided by the change in x.
- For extra support, let students identify the y-intercept before calculating the slope.
- For a challenge, have students verify each equation by substituting one of their selected points.
- Increase engagement by letting partners compare different point pairs and confirm that they produce approximately the same equation.
- Extend the activity by asking students to use one equation to make a prediction for an x-value outside the displayed data range.