



Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Use a regression line to predict values. ✓ Identify the slope and y-intercept. ✓ Find a slope from two points.
 ✓ Understand the risk of extrapolation.

Section A · Concept Check • BEGINNER $4 \times 1 = 4$ _____

- 1 For $y = 3x + 10$, predict y when $x = 4$:
☐ A. 22 ☐ B. 13 ☐ C. 34 ☐ D. 42
- 2 For $y = -5x + 100$, predict y when $x = 10$:
☐ A. 50 ☐ B. 150 ☐ C. -50 ☐ D. 95
- 3 For $y = 1.5x + 8$, the slope and y-intercept are:
☐ A. 1.5 and 8 ☐ B. 8 and 1.5 ☐ C. 1.5 and 0
☐ D. 8 and 8
- 4 The slope through (2,10) and (4,20) is:
☐ A. 5 ☐ B. 10 ☐ C. 2 ☐ D. 0.5

Section B · Problem Solving • INTERMEDIATE $2 + 3 \times 3 = 11$ _____

- 5 In $y = mx + b$, m is the _____.
- 6 For $y = 3x + 10$, when $x = 4$, $y =$ _____.
- 7 A regression line is $y = 3x + 10$. Predict y when $x = 4$.

- 8 A regression line is $y = -5x + 100$. Predict y when $x = 10$.

- 9 For $y = 1.5x + 8$, find the slope and y-intercept.

Section C · Challenge • CHALLENGE 5 _____

- 10 Given points (2,10) and (4,20), find the slope of the line through them.

Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 **Total ___/20**

Teacher's Signature _____

Parent's Signature _____

ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-A 2-A 3-A 4-A | 5 slope 6 22 7 = 22 8 = 50 9 = Slope 1.5, y-intercept 8 | 10 = 5