

Algebra I

5.1-5.2 Review Worksheet

Slope and y-intercepts

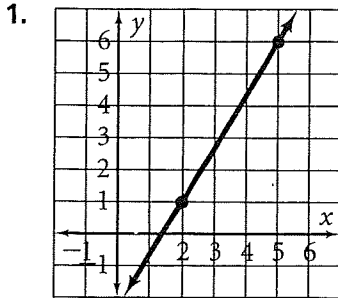
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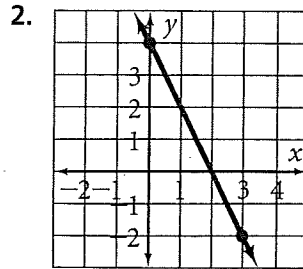
DATE: _____ HOUR: _____

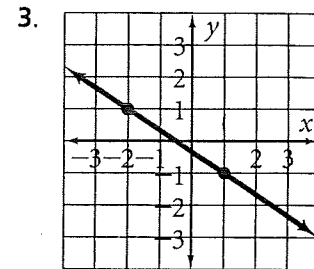
What is the formula for slope given (x_1, y_1) and (x_2, y_2) ? $m = \frac{\quad}{\quad}$

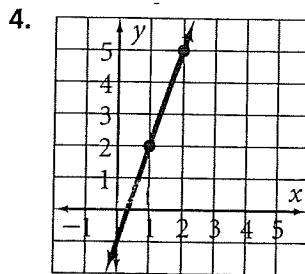
In the slope-intercept equation, $y = mx + b$, what does the b represent? _____

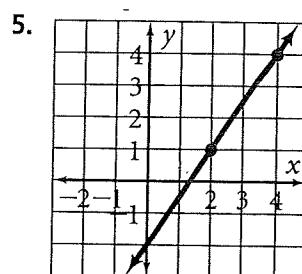
Find the slope of each line.

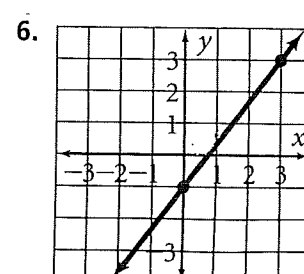












Find the slope of the line that passes through each pair of points.

7. $(1, 2), (4, 3)$

8. $(7, 2), (3, 5)$

9. $(0, 2), (4, 6)$

10. $(-2, 5), (3, -4)$

11. $(2, 4), (6, 7)$

12. $(-2, -5), (4, 5)$

13. $(-3, -2), (4, -2)$

14. $(4, -2), (4, 9)$

15. $(5, 2), (8, -4)$

In the equation $y = mx + b$, what is determined by the

m: _____

b: _____

Give the slope and the y-intercept of the line with the given equation.

1. $y = 2x - 1$

slope = _____

y-intercept = _____

2. $y = x + 2$

slope = _____

y-intercept = _____

3. $y = \frac{2}{5}x + 3$

slope = _____

y-intercept = _____

4. $y = -4x$

slope = _____

y-intercept = _____

5. $y = \frac{5}{2}x - 22$

slope = _____

y-intercept = _____

6. $y = -x - 2$

slope = _____

y-intercept = _____

Write an equation for the line with the given slope, m , and y-intercept, b .

7. $m = -6, b = 1$

8. $m = \frac{3}{7}, b = -1$

9. $m = -\frac{9}{5}, b = -7$

Describe the graph of each line.

10. $y = \frac{2}{3}x - \frac{25}{3}$

slope = _____

y-intercept = _____

11. $y = -\frac{4}{5}x + \frac{6}{5}$

slope = _____

y-intercept = _____

12. $y = \frac{1}{2}x - 4$

slope = _____

y-intercept = _____

13. $y = \frac{4}{5}x + 2$

slope = _____

y-intercept = _____

14. $y = -\frac{7}{4}x + 6$

slope = _____

y-intercept = _____

15. $y = \frac{3}{7}x$

slope = _____

y-intercept = _____

Decide whether the data in each scatter plot follow a linear pattern.

