

Algebra I
5.3 Worksheet #2

Name: _____

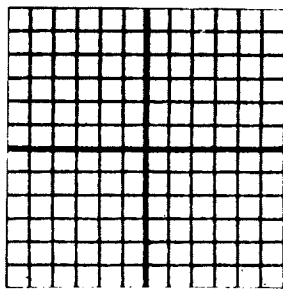
Date: _____ Hour: _____

Give the coordinates where the line for each equation crosses the y-axis.

① $y = 3x + 4$ (0, 4) ② $y = 2x - 3$ _____

③ $y = \frac{1}{2}x$ _____ ④ $y = 2 - x$ _____

⑤ Graph the line through (-1, -1) with slope $\frac{1}{4}$.



Write an equation in slope-intercept form for the line that contains each pair of points.

Step 1. Find the slope.

Step 2. Solve for b.

Step 3. Write the slope-intercept equation.*

Step 4. Check your work.

Complete all steps. Show all of your work.

Box your slope-intercept equations.*

6. (4, 2), (-6, 7)

7. (6, -9), (3, -5)

Step 1. $m =$

Step 1. $m =$

Step 2.

Step 2.

Step 3.

Step 3.

Step 4.

Step 4.

8. $(-9, -1), (3, 7)$

Step 1. $m =$

Step 2.

Step 3.

Step 4.

9. $(2, 7), (5, 22)$

Step 1. $m =$

Step 2.

Step 3.

Step 4.

10. $(4, 11), (8, 14)$

Step 1. $m =$

Step 2.

Step 3.

Step 4.

11. $(6, 22), (2, 14)$

Step 1. $m =$

Step 2.

Step 3.

Step 4.

Find the equations of the lines containing the given points with the indicated slopes.

Solve for b.

12. $(-8, 6); m = \frac{1}{2}$

$y = mx + b$

$y = \frac{1}{2}x + b$

Solve for b.
 $6 = \frac{1}{2}(-8) + b$

$y =$ _____

13. $(2, 5); m = 3$

$y = mx + b$

$y =$ _____

14. $(4, 3); m = -2$

$y = mx + b$

$y =$ _____