

Topic 2.4
Writing Linear Equations
Homework

Name: _____

Date: _____

Write the slope-intercept form of a line with the given information.

1. $m = 12, b = -3$

2. $m = \frac{2}{3}, b = 7$

3. $m = -\frac{3}{8}, b = 0$

State the slope and y-intercept of the graph.

4. $y = 7x + 6$

5. $3x + 5y = 25$

6. $y = gx + k$

Write the equation of the line in slope-intercept form with the given slope and passes through the given point.

7. $m = -2, (4, 5)$

8. $m = \frac{1}{3}, (-9, 4)$

9. $m = \frac{2}{7}, (14, 14)$

Write the equation of the line in slope-intercept form that passes through the given points.

10. $(4, 5)$ and $(8, 8)$

11. $(-2, 5)$ and $(3, -5)$

12. $(0, 6)$ and $(-3, 4)$

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Write the equation of the line in slope-intercept form that is parallel to the given line and passes through the given point.

13. $y = 8x + 5$, (6, 7)

14. $y = \frac{4}{9}x + 1$, (45, 18)

15. $y = \frac{1}{6}x + 13$, (-30, 7)

Write the equation of the line in slope-intercept form that is perpendicular to the given line and passes through the given point.

16. $y = 2x + 8$, (10, 4)

17. $y = \frac{-4}{5}x - 5$, (16, 0)

18. $y = \frac{2}{7}x - 1$, (-8, -7)