Name_____ Class _____ Date_____

2-4 Practice

Form G

More About Linear Equations

Write an equation of each line.

1. slope – 2; (2, 1)

2. slope = –1; (2, 0)

3. slope = 0; (–2, 3)

4. slope $= \frac{3}{4}$; (–3, 5)

5. slope $= \frac{5}{9}$; (10, 4)

6. slope $= -\frac{1}{4}$; (0, –1)

Write in point-slope form an equation of the line through each pair of points.

7. (–2, 3) and (2, 9)

8. (0, 7) and (3, 5)

9. (–2, –3) and (2, –1)

10. (–5, –2) and (–3, 8)

11. (–12, 20) and (–21, 29)

12. (11, 8) and (–2, –3)

Write an equation of each line in standard form with integer coefficients.

13. $y = \frac{3}{2}x - \frac{1}{2}$

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

15. $y = 4.2x + 1.8$

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

Find the intercepts and graph each line.

17. $x + 3y = -4$

18. $-5x - 2y = -6$

Name_____ Class _____ Date _____

2-4 Practice (continued) *Form G*

More About Linear Equations

Write and graph an equation to represent each situation.

19. You have a $30 gift card to an online music store. The gift card will allow you to purchase 5 albums.

20. You park your car in a parking garage for 6 hours. Your fee upon exiting the garage is $42.

Write the equation of the line through each point.
Use slope-intercept form.

21. through (7, 1) and perpendicular to $y = -x + 3$

22. through (2, 9) and parallel to $y = 3x - 2$

23. through (3, 1) and perpendicular to $-4x + y - 1 = 0$

24. through (–6, 2) and perpendicular to $x = -2$

Graph each equation.

25. $3x + y = 4$ **26.** $2x + 5y = 8$ **27.** $-35x - 7y = 56$

28. a. Graph $y = 3x + 2$.

b. Write an equation of the line parallel to the line in part (a) passing through the point (2, 0). Graph the line on the same set of axes.

c. Write an equation of the line perpendicular to the line in part (a) passing through the point (0, –4). Graph the line on the same set of axes.

d. What is the relationship between the lines from part (b) and part (c)?