Name_____ Class_____ Date_____

3-1 Practice

Form G

Solving Systems Using Tables and Graphs

Solve each system by graphing or using a table. Check your answers.

1. $\begin{cases} y = x - 2 \\ x + y = 10 \end{cases}$

2. $\begin{cases} y = 7 - x \\ x + 3y = 7 \end{cases}$

3. $\begin{cases} x - 2y = 10 \\ y = x - 11 \end{cases}$

7. $\begin{cases} 4x + 3y = -16 \\ -x + y = 4 \end{cases}$

8. $\begin{cases} y = -3x \\ x + y = 2 \end{cases}$

9. $\begin{cases} y = \frac{2}{3}x - 5 \\ y = -\frac{2}{3}x - 3 \end{cases}$

Write and solve a system of equations for each situation. Check your answers.

13. Your school sells tickets for its winter concert. Student tickets are $5 and adult tickets are $10. If your school sells 85 tickets and makes $600, how many of each ticket did they sell?

14. A grocery store has small bags of apples for $5 and large bags of apples for $8. If you buy 6 bags and spend $45, how many of each size bag did you buy?

15. The spreadsheet below shows the monthly income and expenses for a new business.

a. Use your graphing calculator to find linear models for income and expenses as functions of the number of the month.

b. In what month will income equal expenses?

	A	B	C
	Month	Income	Expenses
1	May	$1500	$21,400
2	June	$3500	$18,800
3	July	$5500	$16,200
4	August	$7500	$13,600

Name _____ Class _____ Date _____

3-1 Practice (continued)

Form G

Solving Systems Using Tables and Graphs

Without graphing, classify each system as *independent, dependent,* or *inconsistent*

16. $\begin{cases} x + y = 3 \\ y = 2x - 3 \end{cases}$

17. $\begin{cases} 2x + y = 3 \\ y = -2x - 1 \end{cases}$

18. $\begin{cases} x + 3y = 9 \\ -2x - 6y = -18 \end{cases}$

25. $\begin{cases} x + 2y = 13 \\ 2y = 7 - x \end{cases}$

26. $\begin{cases} y = 12 - 5x \\ x - 4y = -6 \end{cases}$

27. $\begin{cases} 25x - 10y = 0 \\ 2y = 5x \end{cases}$

28. You and your business partner are mailing advertising flyers to your customers. You address 6 flyers each minute and have already done 80. Your partner addresses 4 flyers each minute and has already done 100. Graph and solve a system of equations to find when the two of you will have addressed equal numbers of flyers.

29. You are going on vacation and leaving your dog in a kennel. Kennel A charges $25 per day which includes a one-time grooming treatment. Kennel B charges $20 per day and a one-time fee of $30 for grooming.

a. Write a system of equations to represent the cost c for d days that your dog will stay at the kennel.

b. If your vacation is 7 days long, which kennel should you choose? Explain.