

UNIT 2 • REASONING WITH EQUATIONS AND INEQUALITIES**Lesson 2: Solving Systems of Equations****Practice 2.2.2: Solving Systems of Linear Equations**

Graph each system of equations. Then determine whether the system has one solution, no solution, or infinitely many solutions. If the system has a solution, name it.

1.
$$\begin{cases} x - 2y = 8 \\ 3x - 2y = 12 \end{cases}$$

3.
$$\begin{cases} 2x - y = 1 \\ 2y = 4x - 2 \end{cases}$$

2.
$$\begin{cases} x + y = 7 \\ x - y = 1 \end{cases}$$

4.
$$\begin{cases} 3x - y = -2 \\ y = 3x \end{cases}$$

For problems 5–10, write a system of equations, and then use the graphing method to solve each system.

5. You are buying one flower for each member of the swim team to wear at awards night. There are 19 members on the team. You have decided to buy pink roses and yellow roses. The pink roses cost \$3, and the yellow roses cost \$2. You will spend \$50. How many pink roses should you buy? How many yellow roses should you buy?
6. A test worth 100 points has 26 questions. True/false questions are worth 2 points and short answers are worth 5 points. How many 2-point questions are on the test? How many 5-point questions are on the test?
7. The basketball team scored a total of 79 points last game. They made 35 shots, including 2-point shots and 3-point shots. How many 2-point shots did they make? How many 3-point shots did they make?
8. Your class field trip is to a museum that charges \$4 for adults and \$2 for students. It cost \$60 for 27 tickets for your class, the teacher, and chaperones. How many adult tickets were purchased? How many student tickets were purchased?
9. Minh and Mikayla are selling wrapping paper for a school fund-raiser. Customers can buy either packages of folded paper or rolls of paper. Minh sold 6 rolls of paper and 2 packages of folded paper for a total of \$44. Mikayla sold 3 rolls of paper and 9 packages of folded paper for a total of \$54. How much does each roll cost? How much does each package of folded paper cost?
10. Erin has quarters and nickels for a total of 16 coins. The value of his coins is \$2.60. How many quarters does Erin have? How many nickels does Erin have?