

Systems of Equations by Substitution (Day 2)

Date _____ Period _____

Solve each system by substitution.

1) $y = 4x + 8$
 $y = -4x - 8$

2) $y = 5x - 9$
 $y = x - 5$

3) $-2x + 2y = -24$
 $y = x - 12$

4) $-3x - y = 2$
 $y = 5x - 2$

5) $-x - 5y = 15$
 $x = 4y + 3$

6) $-3x + 9y = -1$
 $x = 6 + 3y$

Write a system of equations that could be used to solve each problem. You do not have to solve these (yet).

- 7) The school that Dan goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 11 adult tickets and 2 child tickets for a total of \$126. The school took in \$214 on the second day by selling 11 adult tickets and 13 child tickets. What is the price each of one adult ticket and one child ticket?
- 8) Huong and Cody are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of holiday wrapping paper. Huong sold 13 rolls of plain wrapping paper and 4 rolls of holiday wrapping paper for a total of \$109. Cody sold 1 roll of plain wrapping paper and 4 rolls of holiday wrapping paper for a total of \$49. Find the cost each of one roll of plain wrapping paper and one roll of holiday wrapping paper.
- 9) Darryl and Brenda are selling pies for a school fundraiser. Customers can buy apple pies and blackberry pies. Darryl sold 11 apple pies and 2 blackberry pies for a total of \$181. Brenda sold 7 apple pies and 2 blackberry pies for a total of \$129. What is the cost each of one apple pie and one blackberry pie?
- 10) Kali and Kim each improved their yards by planting rose bushes and geraniums. They bought their supplies from the same store. Kali spent \$92 on 13 rose bushes and 11 geraniums. Kim spent \$74 on 13 rose bushes and 8 geraniums. Find the cost of one rose bush and the cost of one geranium.
- 11) The school that Jimmy goes to is selling tickets to a play. On the first day of ticket sales the school sold 10 senior citizen tickets and 12 student tickets for a total of \$184. The school took in \$174 on the second day by selling 9 senior citizen tickets and 12 student tickets. What is the price each of one senior citizen ticket and one student ticket?