Math-2A Name_____

SM2-A HW #7-2 (Solve Systems of Equations Using Substitution)

Solve each system by substitution.

1) $y = 8x - 12$
$y = -6x + 2$

2) $y = 3x + 22$
$y = 2x + 14$

3) $y = -2x + 14$
$y = x + 2$

4) $y = -5x + 12$
$y = 3x - 20$

5) $5x + 6y = -11$
$y = 2x + 18$

6) $-4x - 2y = -2$
$y = 4x + 1$

7) $y = -3$
$6x - 8y = -6$

8) $y = -6x - 2$
$3x - y = 11$

9) $-7x + y = -24$
$-6x - 5y = -3$

10) $x - 2y = 12$
$3x - 3y = 12$

11) $-8x + 4y = -24$
$-8x + y = -6$

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

13) Totsakan and Nicole are selling cheesecakes for a school fundraiser. Customers can buy French silk cheesecakes and chocolate marble cheesecakes. Totsakan sold 13 French silk cheesecakes and 14 chocolate marble cheesecakes for a total of $369. Nicole sold 2 French silk cheesecakes and 7 chocolate marble cheesecakes for a total of $144. Find the cost each of one French silk cheesecake and one chocolate marble cheesecake.

14) Jennifer and Darryl are selling pies for a school fundraiser. Customers can buy blueberry pies and blackberry pies. Jennifer sold 1 blueberry pie and 10 blackberry pies for a total of $144. Darryl sold 14 blueberry pies and 5 blackberry pies for a total of $126. Find the cost each of one blueberry pie and one blackberry pie.

15) New York City is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 3 vans and 14 buses with 461 students. High School B rented and filled 5 vans and 1 bus with 76 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.