Math-2A Name_____

SM2-A HW #7-3 (Solve Systems of Equations Using Elimination)

1) The local amusement park 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 5 vans and 4 buses with 281 students. High School B rented and filled 13 vans and 8 buses with 601 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.

2) Mike and Lea each improved their yards by planting hostas and ivy. They bought their supplies from the same store. Mike spent $202 on 7 hostas and 12 pots of ivy. Lea spent $176 on 11 hostas and 6 pots of ivy. Find the cost of one hosta and the cost of one pot of ivy.

3) Jasmine's school is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 5 adult tickets and 12 student tickets for a total of $140. The school took in $82 on the second day by selling 13 adult tickets and 3 student tickets. Find the price of an adult ticket and the price of a student ticket.

Solve each system by elimination.

4) $-x + 8y = 22$
$x - 7y = -18$

5) $-2x + 7y = -17$
$4x - 7y = -1$

6) $4x - 10y = 20$
$4x - 10y = 20$

7) $-x - 8y = 9$
$-x - 10y = 11$

8) $-4x + 7y = 2$
$7x - 14y = 0$

9) $2x + 5y = 16$
$4x + 10y = 24$

10) $9x - 6y = -6$
$-5x + 12y = 12$

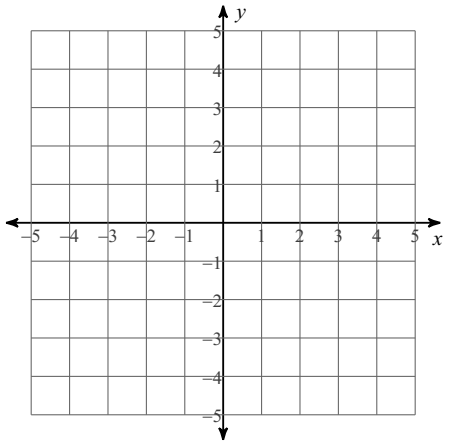
11) $3x + 3y = -9$
$4x - 12y = 20$

12) $-10x + 7y = 8$
$-8x + 5y = 10$

13) $3x + 4y = 29$
$-4x + 7y = -14$

Sketch the solution to each system of inequalities.

14) $y \geq x + 3$
$y \leq -x + 1$



15) $y < 4x + 3$
$y \geq -2x - 3$