Test 3 Review

Solve the system by the method of your choice. If the system is inconsistent and has no solution, state this. If the system is dependent, write "Dependent".

1. $y = 2x - 5$
   $4x + 3y = 15$

2. $x - 3y = 13$
   $2x + 7y = -13$

3. $3x + 2y = 2$
   $-6x + 5y = 32$

4. $5x + 2y = 17$
   $4x - 3y = 9$

5. $4x + y = 22$
   $-3x + 8y = 1$

6. $y = -\frac{2}{5}x + 3$
   $2x + 5y = 10$

7. $y = 3x - 2$
   $2x - 3y = -15$

8. $x + y = -6$
   $-2x + 7y = -69$

9. $9x + 8y = 25$
   $5x - 6y = -7$

10. $2x - 4y = 11$
    $-4x + 8y = -22$

11. The sum of two numbers is 109. One number is 25 more than three times the other number. Find the two numbers.

12. A minor league baseball team charges adults $5 and children $4 for admission. If 1050 people paid a total of $5000 to see last night's game, how many children were at the game?

13. Bill's backyard is rectangular. The fence that runs around the backyard is 130 feet long. If the length of the backyard is 10 feet less than twice the width, find the dimensions of the backyard.

14. Greg deposits a total of $15,000 in two different certificates of deposit (CDs). One CD pays 3% annual interest, while the other pays 2.5% annual interest. If Greg earned $430 interest during the first year, how much was put in each CD?