Algebra 1

Mr. Demick

Chapter 7

February/March

Objective: To Solve Systems of Linear Equations by Elimination with Multiplication

Complete the following ten problems on the included documents for five extra-credit points:

P. 63, #1-9 odd

P. 67, #2-6 all

Answers must be correct for credit.

Name _____

Date _____ Period _____

Solve each pair of equations by addition or subtraction.

1. $x + y = 10$
$x - y = 8$ (9, 1)

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

3. $x + 3y = 7$
$3x + 3y = 9$

4. $x + 5y = -11$
$2x + 5y = -12$

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P. 63, #1-9 ODD
P. 67, #2-6 ALL

5. $3x + y = 5$
$6x + 2y = 10$

6. $4x + 3y = 0$
$5x - 3y = 27$

7. $5x + 2y = -8$
$3x - 2y = -8$

8. $3x - 2y = -4$
$6x + 5y = 37$

9. $4x - 5y = -9$
$2x + 3y = 1$

10. $2x - 3y = 4$
$4x - 6y = 8$

11. $x + 3y = 7$
$x + 3y = -4$

12. $5x - 3y = -18$
$x - 6y = -9$

13. $3x - 2y = 12$
$2x + y = 1$

14. $4x - y = -14$
$3x + 2y = -16$

15. $4x - 7y = -30$
$5x - 7y = -34$

16. $3x - y = -2$
$3x - y = -1$

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

18. $4x + 3y = 19$
$7x - 6y = -23$

19. $5x - 3y = -36$
$2x + 3y = 15$

20. $4x + 5y = 2$
$2x - 5y = 16$

21. $3x + y = 13$
$6x + 2y = 26$

22. $2x - 3y = 20$
$11x + 2y = -1$

23. $4x - 7y = -5$
$3x - 2y = -7$

24. $3x + 2y = -1$
$4x - 5y = -32$

Name _____

Date _____ Period _____

Use two equations with two variables to solve each problem.

1. The sum of two numbers is 18 and their difference is 12. Find each of the numbers.

x = greater number
y = lesser number

$x + y = 18$
$x - y = 12$
$\rightarrow 2x = 30$
$x = 15$

$(15) + y = 18$
$y = 3$

The numbers are 15 and 3.

2. The sum of two numbers is 26 and their difference is 20. Find each of the numbers.

3. The sum of two numbers is 34 and their difference is 14. Find each of the numbers.

#2-6 ALL

4. The sum of two numbers is 28 and their difference is 6. Find each of the numbers.

5. The sum of two numbers is 42 and their difference is 30. Find each of the numbers.

6. The sum of two numbers is 80 and their difference is 22. Find each of the numbers.

7. The sum of two numbers is 15 less than twice the first number. Their difference is 5 less than twice the second number. Find each of the numbers.

8. The sum of two numbers is 8 less than twice the first number. Their difference is 4 less than twice the second number. Find each of the numbers.

9. The sum of two numbers is 10 less than three times the first number. Their difference is 5 less than twice the second number. Find each of the numbers.

10. The sum of two numbers is 6 less than twice the first number. Their difference is 10 less than four times the second number. Find each of the numbers.