Name: _____ Date: _____

Geometry A Unit 4 Algebra Review

Systems of Equations

Solve each system by graphing.

1. y=3-x
   y=-1+x

2. $y = -\frac{1}{2}x + 5$
   $y = -\frac{3}{4}x + 2$

3. x+2y=10
   3x+4y=8

4. x-2y=6
   2x-3y=5

Solve each system using substitution.

5. x+y=4
   y=2x+1

6. x=3y-4
   2x-y=7

7. x-y=-3
   2x+3y=-6

8. y-2x=-6
   2y-x=7

Solve each system using elimination

9. -x-y=8
   2x-y=-1

10. x+3y=19
    x-y=-1

11. x-3y=0
    5x-y=-14

12. 2x+3y=-1
    3x+5y=-2

Solve each system using any of the methods.

13. x=y
    4x=2y-6

14. y=2x-5
    3y-x=5

15. x-3y=7
    -3x+7y=17

16. 3x-8y=11
    x+6y-8=0

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Solve each using a system of equations.

17. Two angles are complementary. Their difference is 34. Find the angles.

18. The measures of two acute angles of a right triangle differ by 18 degrees. What are their measures?

19. The sum of two numbers is 27. One number is 3 more than the other. Find the numbers.

20. Find two numbers whose sum is 66 and whose difference is 8.

21. Marco has 150 coins, all nickels and dimes. He has 12 more dimes than nickels. How many nickels and how many dimes does he have?

22. Four oranges and five apples cost $2.00. Three oranges and four apples cost $1.56. Find the cost of an orange and the cost of an apple.

23. The Booster club made their annual trip to a baseball game. They bought 29 tickets. Some of the tickets cost $7 each and some cost $9 each. All of the tickets together cost $225. How many tickets of each price did they buy?

24. During a publicity campaign, a cycle shop gave away 5000 miniature cycles and bumper stickers. The cycles cost 21 cents each and the bumper stickers cost 14 cents each. The cycle shop spent $826 on the gifts. How many of each gift did they buy?