Algebra I
Chapter 17 – Board Problems

1. You have dimes and pennies and a total of 26 coins. Value is $1.43. How many of each?

2. You have 24 quarters and dimes with a total value of $4.95. How many of each?

3. 298 people going to a football game either chose hotdogs or hamburgers. Hot dogs cost $7 and hamburgers cost $9.50. If total receipts for both were $2463.50, how many of each were sold?

4. Solve by Substitution:

$$-2x + 6y = 6$$
$$-7x + 8y = -5$$

Algebra I – Guided Notes for Chapter 17

What are three consecutive integers beginning with n?

What are three even consecutive integers beginning with n?

What are three odd consecutive integers beginning with n?

Example Problem 1:

What are three consecutive integers such that three times the first plus two times the third is 29?

Example Problem 2:

Find three consecutive even integers such that two times the first plus two times the second is equal to six times the third.

Example Problem 3:

Find three consecutive odd integers such that four times the third plus one is the same as three times the first plus two times the second.

Algebra Problems of the Week, #1

Name_____

Solve simultaneous equations by SUBSTITUTION.

1. $-5x + y = -3$
   $3x - 8y = 24$

2. $-2x + 6y = 6$
   $-7x + 8y = -5$

3. $x + 3y = 1$
   $3x + 3y = 15$

LESSON PRACTICE

Follow the directions to find the unknown integers.

Find three consecutive integers such that the sum of the integers plus four is equal to four times the second integer.

1. Represent each integer with an unknown.

2. Write an equation using the unknowns.

3. Solve for the three integers.

4. Check by substituting the integers in your equation.

Find three consecutive even integers such that the sum of the first and second integers is equal to the third integer, plus four.

5. Represent each integer with an unknown.

6. Write an equation using the unknowns.

7. Solve for the three integers.

8. Check by substituting the integers in your equation.

Find three consecutive integers such that five times the second integer is equal to three times the sum of the other two, plus two.

9. Represent each integer with an unknown.

10. Write an equation using the unknowns.

11. Solve for the three integers.

12. Check by substituting the integers in your equation.

Find three consecutive odd integers such that the first plus the third is equal to three times the second, plus three.

13. Represent each integer with an unknown.

14. Write an equation using the unknowns.

15. Solve for the three integers.

16. Check by substituting the integers in your equation.