General Algebra II   CWS #1   Unit 1   page 1   _____

Solve each of the following equations. Express all fractions in lowest terms. Show your process steps neatly organized.

1. $5x + 4 = 7$

2. $8x - 5 = 21$

3. $9x + 19 = 7$

4. $6x - 11 = 4$

5. $7x + 2 = 3x + 26$

6. $9x - 13 = x + 5$

7. $12x + 25 = 7x - 15$

8. $11x - 5 = 5x - 20$

Solve each of the following equations. Express all fractions in lowest terms. Show your process steps neatly organized.

9. $2(3x + 5) + 3(x - 4) = 6$

10. $4(x + 3) + 3(2x + 1) = 20$

11. $5(2x - 3) + 2(x + 2) = 6$

12. $6(3x - 2) + 5(2x - 3) = 15$

13. $4(3x + 5) - 2(3x + 1) = 15$

14. $5(x + 3) - 7(3x - 2) = 9$

Solve each of the following word problems algebraically. Show your process steps neatly organized. (One variable solutions please.)

15.   The length of a rectangle is 3 inches less than twice its width. The perimeter of the rectangle is five feet. What are the dimensions of the rectangle?

16.   A hotdog costs 75 cents more than a soda. A burger costs 20 cents less than three times as much as a soda. 4 burgers, 3 hotdogs, and 7 sodas cost a total of $19.05. How much does each item cost?

17.   In a collection of ordinary dimes and quarters, the number of dimes is 3 more than 4 times the number of quarters. If the total value of the collection is $12, then how many coins of each type are there?

Solve each of the following word problems algebraically. Show your process steps neatly organized. (One variable solutions please.)

18.   An iron rod that is ten feet long is cut into three pieces. The length of the longest piece is two inches more than three times the length of the shortest piece. The middle piece is eight inches longer than the shortest piece. How long is each piece?

19.   A collection of sixty ordinary quarters and nickels is worth a total of $8. How many coins of each type are there in the collection?

20.   Find six consecutive integers whose sum is 333.