Seventh Grade Math, First Semester

Assignment Seven

(Work to be submitted)

38 Points

COMPLETE THE TABLE USING X's. (2 points)

1.

Number	Divisible by…							
	2	3	4	5	6	8	9	10
660								
5091								

2. Find the prime factorization of 196. Use a method of your choice. List your final answer using exponents.   (2 points)

Answer _____

PRIME, COMPOSITE OR NEITHER? (1 point each)

3.   1   4.   47   5.   152

COMPLETE THE SEQUENCES. (1 point each)

6.   0, 16, 32, 48, 64, _____, _____, _____

7.   2, 9, 11, 18, 20, 27, _____, _____, _____

8. List all the factors of 54 and 90. List their GCF. (3 points)

54:

90:

GCF (54, 90): _____

EXPRESS EACH FRACTION OR RATIO IN SIMPLEST FORM. (2 points each)

9. $\dfrac{32}{160}$

10. $\dfrac{49}{72}$

11. $\dfrac{232}{144}$

12. $\dfrac{18}{24}$

CRITICAL THINKING AND APPLICATIONS.

13. Using the divisibility rules, explain why 678 is divisible by 2, 3, and 6.   (2 points)

14. Mrs. Buchanan is planning marching routines for the school band. The band has 36 members. Band members can march in any number of rows as long as each row has the same number of members. The marching path, however, limits members to 6 per row. (3 points)

a. Make a list of the different arrangements that Mrs. Buchanan could use.

Now, what happens if she can use more than 6 members per row?

b. Make a list of the different arrangements she can use.

15. Lori is president of a book club. She has a message she wants to get out to her book club members. On Monday, she called one member and asked that member to call two other members by noon the next day and repeat the message. How many calls were made by Friday afternoon? (3 points)

16. Bennie is catering a wedding and is putting finger food on plates. He has 72 cheese puffs and 48 carrot sticks. He wants both kinds of food on each plate. He wants to distribute the food evenly, and he doesn't want any left over. (1 point each)

      a. What is the largest number of plates he can use?

      b. How many of each type of food should he put on each of those plates?

17. In the U.S. presidential election of 1864, Abraham Lincoln received 2,218,388 of the 4,031,887 votes. About what fraction of the votes did Lincoln receive? Put in simplest form. (2 points)

REVIEW AND PRACTICE.

18. Find the area of a parallelogram with a base of 5 cm and a height of 15 cm. (1 point)

19. If $p = 12$ and $q = 3$, evaluate $4p - q$. (2 points)

20. Find the mean, mode(s), and median for the following set: 90, 92, 94, 91, 90, 94, 95, 98 (3 points)