MTH-107 Review for Test 1 Luczak

1. Write 5,800 as a product of prime factors.
2. Write 153 and 357 as a product of prime factors and then find their GCF and LCM.
3. A choral director needs to divide 180 men and 144 women into all-male and all-female groups. If each group is to have the same number of members how many should be in each group. (Hint: GCF)
4. If hot dogs come in packs of 10 and hot dog buns come in packs of 8 what is the minimum number of packages of each would you have to purchase so that you ended up with the same number of hot dogs and buns?
5. Use the associative property to fill in the blanks 
6. Use the commutative property to fill in the blanks 
7. Use the distributive property to simplify 
8. TRUE or FALSE: Subtraction is commutative. Explain.
9. Use the properties of exponents to simplify the following, do not leave any negative exponents:
10. 
11. 
12. 
13. 
14. Rewrite in decimal notation: 
15. Rewrite in scientific notation: 
16. Perform the indicated operation and leave answer in scientific notation:
17. Evaluate the expression using the given values: where  and 
18. Solve the equation:
19. Solve the equation:
20. Solve the equation:
21. If 4 times a number is added to -8, the result is equal to 12 times the number. Find the number.
22. After a 20% price reduction, a cordless phone sold for $48. What was the phone's price before the reduction?
23. A salesperson earns $300 per week plus 5% commission on sales. How much must be sold to earn $800 in a week?
24. Solve the inequality, leave answer in interval notation:
25. Solve the inequality, leave answer in interval notation: 
26. Solve the inequality, leave answer in interval notation: 
27. To pass a course, a student must have an average on three tests of at least 60. If a student scores 42 and 74 on the first two tests, what must be earned on the third test to pass the course?
28. Use FOIL to multiply
29. Solve the equation: 
30. Solve the equation: 
31. Solve the equation: 
32. Solve using the quadratic formula : 
33. Solve using the quadratic formula : 