WP RWS #2

Your Middle Name Only: _____

#1-3, Find each value.

1. What is 52% of 98?   **2.** 9 is what percent of 63?   **3.** 2.5% of what number is 15?

#4-7, Translate to math.

4. A number times negative five is 40.   **5.** One-third of the sum of a number and four is 24.

6. The quotient of a number and 6 is the same as three more than twice the number

7. Four times the difference of a number and seven is the same as the product of six and eight.

#8-15, Write an equation to model the situation, then solve it. UNITS!

8. The total cost of iPad bought in Sacramento, California (so, including sales tax) was $563.00. If the sales tax is 7.25%, what was the price of the iPad before tax (the MT price)?

9. *Simple Interest earned = Prt* (remember this formula?). If Alex deposits $5,000 in a mutual fund that earns 2% interest, how long will he need to leave it in the fund to earn $450?

10. An electrician charges $30 to drive to Sam's house and $45 per hour to fix the circuits he blew with his electric guitar. If the bill was for $210, how long did the electrician work?

11. Colsen is throwing his parents a party to thank them for all their years of patience and love. It will cost him $225 to rent the Gallatin Gateway Inn banquet room and $12 per person attending (for appetizers, etc.) If his total bill is $1005, how many people attended?

12. (Draw and label a diagram before beginning). Delaney's dresser is 70 inches tall and has four identical vertical drawers. The distance between each drawer is 3 inches. From the top of the dresser to the first drawer is 5 inches. From the bottom drawer to the lower edge of the dresser is 4 inches. How tall is each drawer?

13. Diagram: In drafting class you are designing a house with 3 windows on the north side. Each window is 3 feet wide. There are 4 feet between the edges of the house and the windows. The width of the house is 33 feet. How far apart will the windows be?

14. You are growing two varieties of tomato plants. The regular tomato plant is 12 inches tall and is growing at a rate of 1.5 inches per week. The cherry tomato plant is 6 inches tall and growing at a rate of 2.25 inches per week. When will the two plants be the same height?

15. The length of a rectangle is 5 more than its width. The perimeter of the rectangle is 54 inches. What are the length and the width of the rectangle?

16. Scarlytt's parents pay her an allowance each month as long as she remains a lovely and studious young lady. She spends half of her monthly allowance on new clothes. The remaining money she spends as follows: 1/3 for going out to lunch and 1/5 on iTunes downloads. The remaining $31 she saves. Given this information, how much do Scarlytt's parents pay her each month?

#17-20, And what if it was an inequality statement? Express the statement mathematically.

17. In order to ride the rollercoaster, Bridget must be taller than 60 inches.

18. You will need no more than 5 colored pencils for Mrs. Paff's art project

19. Mr. Blockey, the basketball coach, is purchasing equipment for the basketball team. He has a budget of no more than $1395. A case of basketballs costs $75. Each uniform costs $95. Select the inequality that describes this situation.   (x = the number of cases of basketballs   y = the number of uniforms)

   a) $75x \cdot 95y > 1395$ b) $75x + 95y \geq 1395$ c) $75x \cdot 95y < 1395$ d) $75x + 95y \leq 1395$

20. Kenzie wants to save some files on her flash drive. Each photo takes up 2 MB and each document takes up 0.1 MB. Together the files can take up no more than the 50 MB of total storage space available on the flash drive. Select the inequality that describes this situation.   (p = the number of photos   d = the number of documents)
   a) $2p + 0.1d \geq 50$ b) $2p + 0.1d \leq 50$ c) $2p + 0.1d < 50$ d) $2p + 0.1d > 50$