REAL LIFE WORD PROBLEMS

Directions: Select one of the problems on this list, find the information you need it, and solve it. Write your solution up neatly, indicating the sources you used to find the numbers you needed.

1. You are going to paint your bedroom. How large is the room? How many coats of paint will you need of your preferred color? How much paint will you need to buy? How much will it cost?

2. You are going to buy a car; since you don’t have a lot of money, you will finance the car. What car do you want? How much does it cost with the options that you want? How much money do you need up front for a down payment? What will the payments be? How much will you end up paying for the car?

3. You are making purses as gifts from Vogue Pattern 7862 (Shoulder Bag in Two Sizes from Today’s Fit by Sandra Betzina). You are making view A (average size). You are trying to use up fabric from your stash; you have a piece of brocade that measures $4\frac{7}{8}$ yards. How many bags can you make? How much interfacing will you need? What other notions will you need to buy?

4. You are installing a hardwood floor in your livingroom. How large is the room? How much wood will you need to buy? How much will it cost?

5. You are growing a garden. What are you growing? How large will your garden be? How many plants can live happily in that much space? How much organic matter do you need to buy to enrich the poorly draining clay soil that we have around here? How much border will you need to buy?

6. You are baking cookies for the PTA bake sale. You have been asked to make 300 cookies (your choice of type). How much do you need of the ingredients? What is your shopping list?

7. You have decided to eat more healthfully. What do mainstream nutritional experts suggest should be part of a healthy diet? Come up with a menu for a full day that meets many of these nutritional goals. Be specific when you explain how your menu meets these goals.

8. You are making a quilt that measures $80'' \times 86''$ and you want to bind it with strips that are cut $2\frac{1}{2}''$ wide. How large a piece of fabric would you need to cut out the binding?

9. You and 3 of your friends are planning a road trip to New Orleans for Mardi Gras. How far is it? How long will it take to drive? What will you need to pay for? How much is each person’s share of the costs?

10. Write your own problem from your own life.
Name: ________________________________

**Needed Information**

3: The student has found all numbers necessary to complete the problem. Numbers have been found from reasonable and reputable sources. All sources have been cited appropriately; the instructor can easily verify all information. Estimates are only used when exact values are unavailable, and all estimates are reasonable.

2: The student has found many of the numbers necessary to complete the problem. Some numbers may be from questionable sources, or the sources might not be clearly referenced. Estimates are being used when exact numbers could be found, or estimates seem to be unrealistic.

1: The student has made minimal effort to find numbers needed to solve the problem. Numbers can not be verified, or far too many of them are estimates, or estimates are grossly inaccurate.

0: The vast majority of numbers used are unjustified or unrealistic. There is little evidence that the student did any reasonable research to find the necessary information.

**Computing the Answer**

3: All calculations are appropriate and accurate. The solution is correct.

2: Most calculations are appropriate or accurate. The solution is reasonable.

1: Many calculational errors. The solution is mildly plausible.

0: The solution is unreasonable.

**Write-Up**

3: The write-up conforms to the rules of Standard Written English. It is clear what each number means and what its role is in the problem. The student has explained the problem solving process.

2: Small errors in the write-up. Minor lack of clarity. Some problems with explanations. Some spelling or grammar errors.

1: The write-up is unclear in some way. The problem solving process might not be fully explained. There may be serious errors in spelling or grammar.

0: The write-up consists almost entirely of numbers and has very few words.

**Neatness**

1: The solution is neat and well-presented.

0: The solution is difficult to read.