Directions: The math problems on this sheet are due by Friday this week. It is broken into sections as a suggestion of how many problems you should complete each night for a manageable amount of work. You may work at your own pace as long as it is completed by Friday.

Write the prime factorization of each number.

1. 30 = _____
2. 40 = _____

Write the number that can be represented by the product.

3. $2^4 \times 3^2$ = _____

4. $3^2 \times 5^2$ = _____

5. Lynn wrote the prime factorization of 42 as *1 x 2 x 21*. It was marked incorrect.
What did she do wrong? _____
_____
What is the correct prime factorization of 42?
_____

Solve.
1. A restaurant charges $1.15 for juice and $3.90 for a vegetable sandwich. How much does a vegetable sandwich with juice cost in all?
_____

2. Cam paid $28.31 for 9.5 gallons of gasoline in June 2007. How much did he pay per gallon?
_____

3. Lori is 12 ¼ years old. Her brother is 7 ½ years old. What is the difference in their ages?
_____

4. Misty needs 2 5/8 yards of material for one costume. She will make 12 costumes for the school play. How much material should she buy?
_____

5. Sales tax is 6% in Rob's town. How much sales tax will he pay on a pair of shoes that cost $41.50?
_____

Solve.

1. Crystal invested $500 at 8% interest per year. How much interest will she have at the end of the year?

   _____

2. How much, including interest, will be in her account at the end of the year?

   _____

3. Phil and his friends paid $28 for lunch. They want to leave a 15% tip. How much money should they leave? _____

4. Ms. Hobbs has 6 ¾ pounds of Georgia pecans to share among 12 children. How much should each child receive? _____

5. A recipe calls for 2/3 cup of flour. Dan wants to make only half of what the recipe calls for. How much flour will he need? _____

Convert each measurement.

1. 2 ¼ tons = _____ lbs

2. 5 pints = _____ c

3. 4 mi = _____ ft

4. The track surrounding the football field is ¼ of a mile long. How many yards is the track?

   _____

5. One quart of strawberries weighs about 2 lbs. About how many quarts of strawberries would weigh ¼ ton? _____