Word Problems

1. A puzzle, when done, measures 51.75 x 36.51 cm. It is done on a board that is 2.5 ft x 1.5 ft.
   One foot is 30.48 cm.

   a. Explain how to estimate whether the puzzle fits on the board or not.

   b. Find the dimensions of the board in centimeters.

   c. If the puzzle is placed in the middle of the board, what size
   are the margins that are left on the four sides?

2. A scientist measured the length of some tadpoles caught from a pond. The recorded lengths
   are below, in centimeters. Find the average and make a bar graph.
   3.2 3.1 3.4 3.1 3.5 2.9 2.7 2.7 3.0 3.0 3.1 3.4 3.2 2.8 2.8
   2.9 3.6 3.4 2.9 3.4 3.1

3. Amanda bought two gallons of milk for $3.17 per gallon, three pounds of chicken for $1.04
   per pound, and three dozen eggs for $1.24 per dozen.

   a. Write an expression for the total cost.

   b. How much change will Amanda get from $50?

4. Find the unit prices for the following items. Round to the nearest cent.

Item and price	Unit price	What would this cost...?	
3 lb chicken for $3.24		5 lb chicken	
4.5 lb ground beef for $11		10 lb beef	
4 lb bananas for $1.99		2.5 lb bananas	
32 oz of orange juice for $3.65		12 oz orange juice	

5. A car goes 37 miles with one gallon of gas. Gasoline costs $2.98 per gallon.

   a. How far could you drive for $20?

   b. What is the cost of gasoline to drive a 550-mile trip?

6. The Smith family is planning a vacation trip. They are a family of four: two kids and two
   adults. Adults' flight tickets are $156.40 each and kids' tickets are $108.55 each. They
   plan to rent a car for 4 days, at $41.59 per day, and to visit an amusement park with adult
   tickets costing $34.45 and children's tickets costing $25.55.

   What will the total cost of their trip be? Write an expression.