Unit One Review (do all work on a separate sheet)

(Remember that this has the key ideas that make up your knowledge base for this unit). This is considered as a major hand-in assignment.

A. Terms: (use the definition given or re-write so that it makes sense to you). Remember you have a practice quiz of these terms at
http://schools.spsd.sk.ca/mountroyal/Hoffman/Apprenticeship/Activities/Vocabunit1.htm
and that you are provided with a formal definition.

Rate, ratio, proportion, exchange rate, buying rate, promotion, markup, selling rate, unit price, unit rate.

Have you written them out? Do not proceed until you have these definitions.

B. Simple Equations (answer can be left in fraction form or decimal form)
1. $3x = -12$ 2. $-5x = -20$
3. $x + 7 = -9$ 4. $x - 6 = 12$
5. $7 - x = -12$ 6. $2x + 4 = 3x + 8$
7. $4x - 9 = 2x - 1$ 8. $-3x + 6 = 5x + 2$
9. $11x + 9 = 8x - 4$ 10. $7x + 4 = -3x - 16$

C. Ratio – reduce each of the following:
1. $\dfrac{3}{9}$ 2. $\dfrac{12}{30}$ 3. $\dfrac{6}{14}$ 4. $\dfrac{50}{125}$

D. Solve the following ratios:
1. $\dfrac{x}{9} = \dfrac{5}{45}$ 2. $\dfrac{x}{4} = \dfrac{8}{6}$ 3. $\dfrac{6}{5} = \dfrac{x}{3}$ 4. $\dfrac{20}{5} = \dfrac{x}{2}$

5. $\dfrac{3}{x} = \dfrac{5}{4}$ 6. $\dfrac{7}{x} = \dfrac{28}{2}$ 7. $\dfrac{4}{10} = \dfrac{10}{x}$ 8. $\dfrac{3}{6} = \dfrac{18}{x}$

E. Solve the following problems
1. If 3 cups of cranberry juice are part of a fruit drink recipe that makes 10 cups, how many cups of cranberry juice are required to make 65 cups of the fruit juice recipe?
2. If it costs $2.10 for 100 g of white fish, how much will it cost to buy 350 g?
3. If a 24 oz container of Aunt Jemima pancake syrup costs $6.35, how many containers can be bought for $57.15?
4. A scale drawing of a boat uses 1 inch = 7 feet. Find the actual length of the boat measures 5.25 inches.
5. If the total mass of 300 concrete blocks is 2100 kg, calculate the mass of 700 concrete blocks.
6. If a can of paint covers an area of 350 square feet, how many cans are required to put two coats of paint on the walls of a room that has a total are of 960 square feet.

F. Which is a better buy?
   a. 12 oz can of soup at $2.39 or a 18 oz can at $3.69?
   b. 200 bricks at $193.40 or 260 brick at $274.30?
   c. 16 kg bag of flour at $7.19 or 20 kg bag at $9.29?
   d. 1 liter of paint at $12.37 or 3.78 liters at $43.20?
   e.

G. Determine the cost of each item after applying the given markup?
   7. The whole sale price of a winter ski jacket valued at $158.00 with a mark up of 26%.
   8. The whole sale price of a sofa and chair valued at $1240.00 with a mark up of 18%.
   9. The whole sale price of a plasma 42 inch television valued at $698.00 with a mark up of 34%.
   10. The whole sale price of a apple computer valued at $1649.00 with a mark up of 8%.

H. Determine the sale price of an item after applying the price reduction?
   a. The original price of a lazy boy recliner valued at $929.00 with a mark down of 42%.
   b. The original price of a ski doo valued at $7450.00 with a mark down of 22%.
   c. The original price of a triple glass picture window valued at $2890.00 with a mark down of 8%.
   d. The original price of a cruise vacation valued at $6350.00 with a mark down of 30%.

I. Determine the measure of the missing side of these similar geometric figures.