2.1–2.2   Quiz

Liquid Hand Soap   **In Exercises 1–5, use the information below.**

Brand A	Brand B	Brand C
7.5 fl oz $1.99	19.95 fl oz $2.39	32 fl oz $2.99

1. Compare the unit prices of the three brands of liquid hand soap.

2. A family of 4 uses 128 fluid ounces of liquid hand soap annually. Suppose the family purchases brand C instead of brand A. Estimate the annual savings for the family.

3. The wholesale price of brand A is $0.99.

   a. Find the markup.

   b. Find the markup percent.

4. You have a coupon for 10% off brand B.

   a. How much can you expect to pay for brand B?

   b. How does the coupon affect the unit price of brand B? Explain your reasoning.

   c. Does brand B give you the most hand soap for your money after you use the coupon? Explain your reasoning.

5. Below is a recipe for homemade liquid hand soap.

   Homemade Liquid Hand Soap

   * 1 bar of soap   ($0.33)   * 1 tsp glycerin   ($0.14)
   * 1 tbsp honey   ($0.19)

   Grate the soap and put it in a blender with 1 cup of boiling water. Blend the soap and water. Then stir in the honey and glycerin. Let the mixture cool for 15 minutes, and then blend. Add cold water until you have 6 cups of mixture. Blend the mixture again and pour it into a container to let it cool. Do not put a lid on the container.

   a. What is the unit price of the homemade liquid hand soap?

   b. You make your own liquid hand soap instead of buying brand C. What is the discount percent?