On a separate sheet of paper solve the given word problem, using algebraic equations, showing proper steps.

1. The Shirley Temple drink is made with a ratio of eight parts of ginger ale to one part grenadine syrup. How much of each is needed to make a 12 ounce Shirley Temple?

2. The measures of the angles of a triangle are in the ratio of 1 : 2 : 3. Find the measure of each angle.

3. A U.S. one dollar coin is made of copper, zinc, manganese, and nickel in the following ratio: 44 : 3 : 2 : 1. Its mass is 8 grams. How many grams of each element are in a one dollar coin?

4. An 18 – Karat gold necklace weighs 24 grams: 18 grams of pure gold and six grams of metal alloy. The cost of the necklace is $1200. There is a matching bracelet, weighing 10 grams.
    a. What should be the cost of the bracelet?
    b. How many grams of each, pure gold and metal alloy, should the bracelet contain?

5. A Toyota Prius drove 208 miles on 5 gallons of gas. How far should it be able to go on a full, 11 gallon, tank?

6. A six-pack of Coke costs $2.09. At this rate, how much should 32 cans cost?

7. Kareem Abdul-Jabbar holds the NBA record for the most points scored in a career, 38,387. In the first 280 games of his career, LeBron James has scored 7446 points. At this rate, how many more games will LeBron James need to play to break Abdul-Jabbar's career record?

8. The Lakers have won 27 games and lost 17 games. At this rate, how many games should they win, in an 82 game season?

9. Tax on a $25 item is $2.06. What should be the tax on a $45 item?

10. The results of a recent survey of 1500 American adults show that 525 approve of the job that President George W. Bush is doing and 975 do not approve.
    a. What is the ratio of those that approve to those that do not?
    b. If there are 199 million adults in the United States, how many approve of George W?
    c. If a larger survey was done, showing 5000 people approving of George W, how many were surveyed?

11. The New Jersey Devils ratio of wins to loses to ties is: 6 : 3 : 1.
    a. What is the ratio of wins to total games played?
    b. What is the ratio of loses to total games played?
    c. What is the ratio of ties to total games played?
    d. If there have been 50 games played, how many have the Devils won, lost, and tied?
    e. How many games should they win, lose, and tie in an 82 game season?