1. The population of San Francisco is 750,000 in an area of 49 square miles. What is the population in San Francisco? Express your answer in people per acre. (1 mi^2 = 640 acres)

2. A sugar-free powdered drink mix sells for $2.99 per can. Each can of the mix contains 50.2 g of powder, which, when added to water, will make 8 quarts of drink. What is the cost of the powdered drink mix in dollars/lb? (454 g = 1 lb.)

3. A car is travelling at 60 miles per hour. Express this speed in kilometers per hour (km/hr). (1 mi = 1.609 km)

4. A whole chicken sells for $7.06 and has a mass of 1.5 kg. A beef shank sells for $10.00 with a mass of 2.5 kg. Compare the per pound cost for each item. (1 kg = 2.2 lb)

5. How many seconds are there in one (1.00) day? (1 day = 24 hours)

6. The speed limit on a certain highway is 72 km/hr. What is this speed in cm/sec?

7. Gold has a density of 19.3 g/cm^3. What is the mass, in kilograms, of one (1.00) cubic meter of gold?

8. An automobile can travel 40.0 miles on one (1.00) gallon of gasoline. How many kilometers per liter is this? (1.61 km = 1 mi; 1 L = .264 gal)

9. Suppose that gold is selling at $375/ounce. How many milligrams of gold could you buy for one (1.00) cent? (16 oz = 1 lb; 1 lb = 454 g)