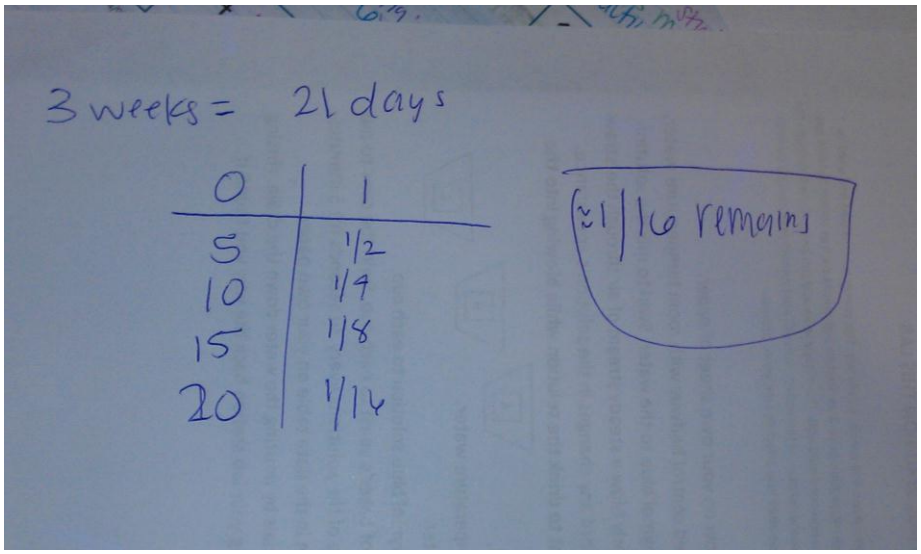
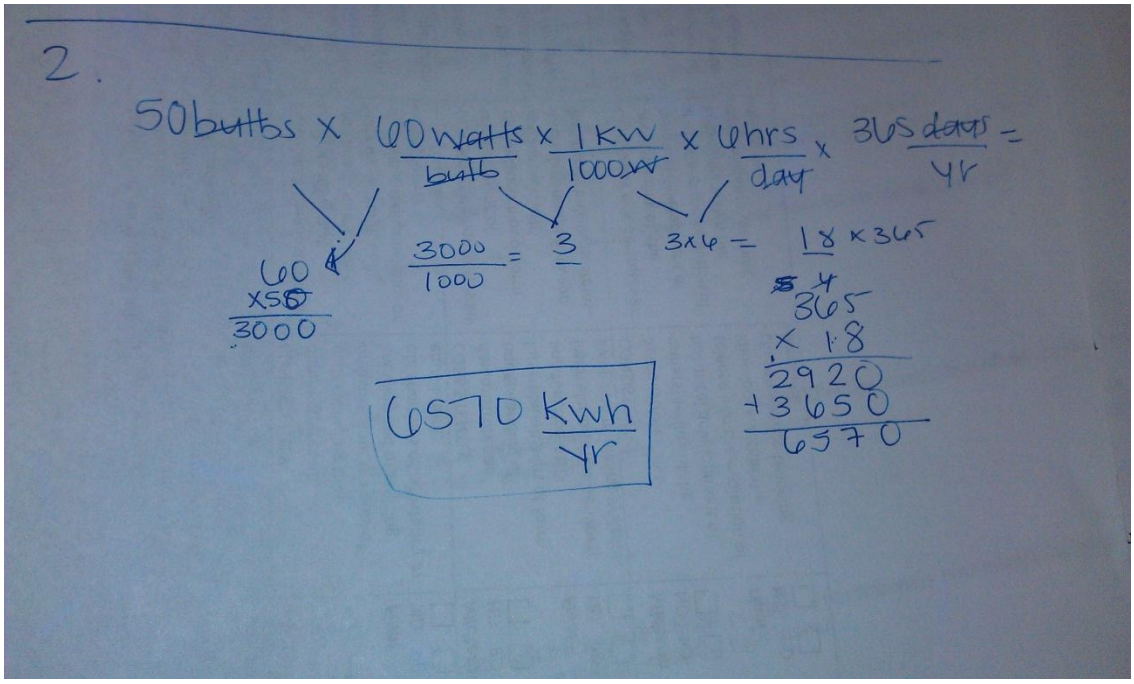
Practice Problem Answers

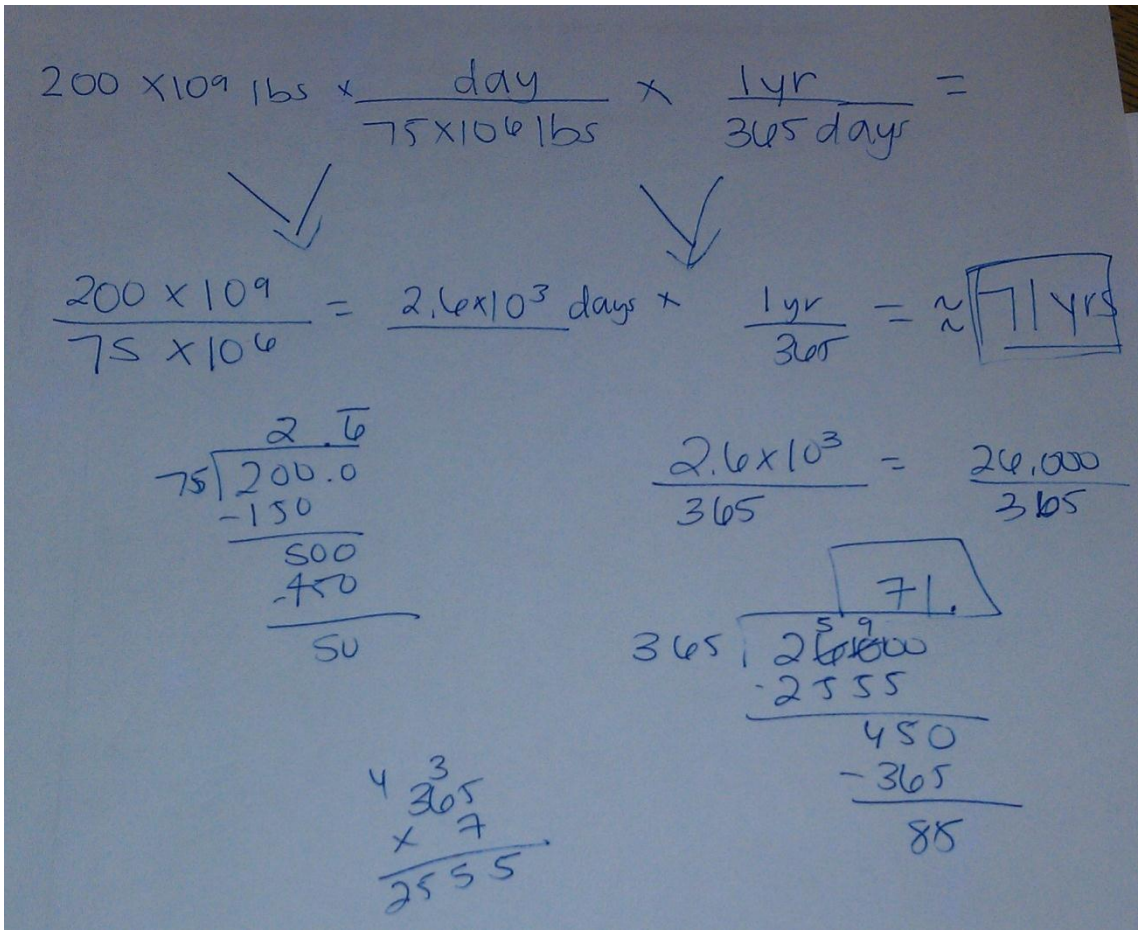
1. The half-life of beryllium gas is approximately 5 days. What fraction would remain after 3 weeks?



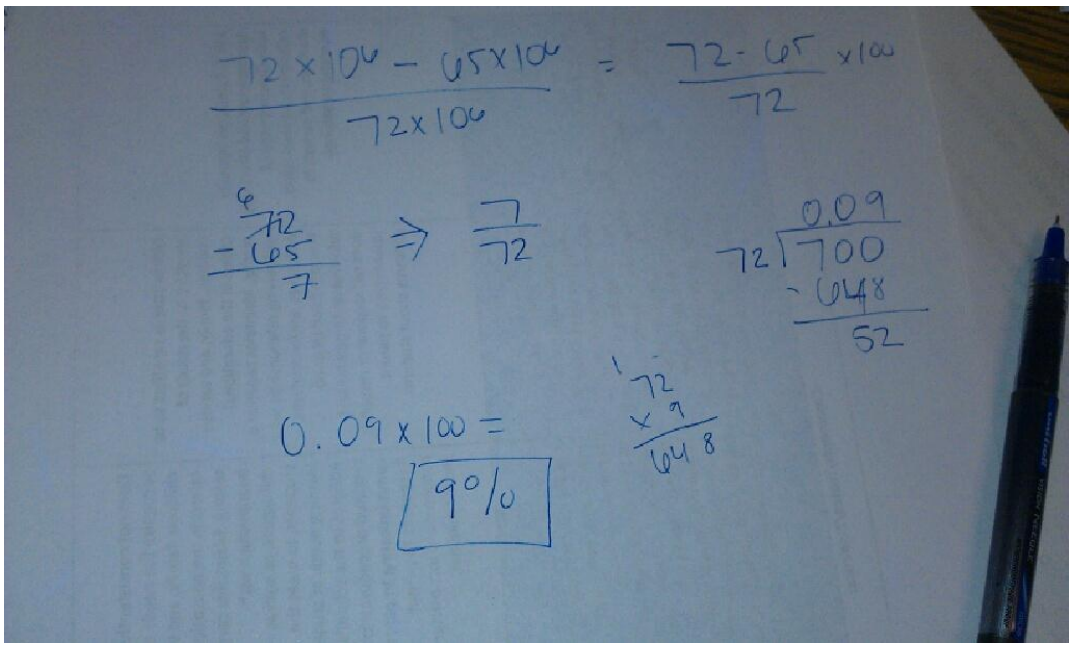
2. A home uses fifty 60 watt bulbs for 6 hours a day. About how many kilowatt-hours are consumed in one year by using the light bulbs?



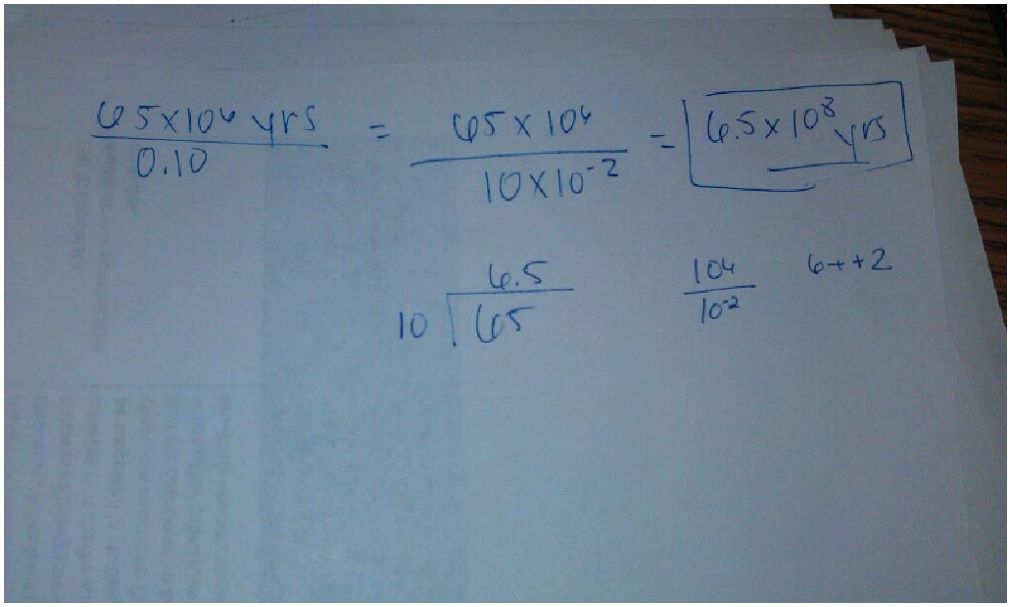
3. If the world has a reserve of 200 billion pounds of coal. How many years would it take to use all of our reserve if we use 75 million pounds per day?



4. In 1990 we used 65 million pounds per day and in 1999 we used 72 million pounds per day? What is the percent increase?



5. Bromine has a half-life of 65 million years. It is determined to be safe when it has decayed to 0.10% of its original amount. When will it be safe?



6. If the net primary productivity of a particular forest is 13,000 kcal/m^2 and the respiration of the trees in that forest is 10,000 kcal/m^2, what is the gross primary productivity?