1. a. Write 43 = 64 in logarithmic form.

2. Solve algebraically;

 

3. Write  in terms of logarithms of x, y and z.

4. Rewrite as a single logarithm:

 

5. The population of a town is modeled by the equation  where t is measured in years. In what year will the population be 25,000?

6. The population of the United States tends to grow at a rate proportional to the exponential model:



where t is the number of years since 1960 and A(t) is the population in millions.

a. What was the population in 1960?

b. What is the population in 2008?

c. In what year will the population in the United States exceed 1 billion?

7.

 