Homework: pg 466 # 1-6(bdf), 13, 14, 16, 19, 21

**Evaluating Logarithms: Part 2**

**Warm-Up**

Solve the following equations.

a) b) c)

**Applying Logarithms in Context**

1. All breathing organisms contain a fixed proportion of Carbon-14 atoms based on the atmospheric composition at the time. Once an organism dies, the amount of Carbon-14 present in the organism decays exponentially with a half-life of 5730 years. Suppose a human corpse is known to have started with 20000 C-14 atoms. When it is found several years later, it is found to only have 12000 C-14 atoms. How old is this corpse?

2. The following equation is used to relate the number of days, D, it takes for a planet to revolve around the sun if it is 'k' million kilometres from the Sun.

Venus takes approximately 225 days to revolve around the Sun. What is the average distance of Venus from the Sun?