

### **Answer on Question #46159 – Math - Other**

The population of a colony of bacteria doubles every "a" days, where "a" is a positive integer. If the population is 4,000n on day 8a, on which of the days is the population 500n?

#### **Answer:**

If the population doubles every  $a$  days, then it was 2000n on the day 7a, 1000n on the day 6a, and 500n on the day 5a. Thus, the population was 500n on the day 5a.