

6. **Bacterial Growth** A culture of bacteria obeys the law of uninhibited growth. If 500 bacteria are present initially and there are 800 after 1 hour, how many will be present in the culture after 5 hours? How long is it until there are 20,000 bacteria?
7. **Population Growth** The population of a southern city follows an exponential model. If the population doubled in size over an 18-month period and the current population is 10,000, what will the population be 2 years from now?
8. **Population Growth** The population of a midwestern city follows an exponential model. If the population decreased from 900,000 to 800,000 from 1995 to 1997, what will the population be in 1999?