## Population Assignment

1. The population of fish in a lake is declining at a rate of $2 \%$ per year. Given that there are currently 3000 fish in the lake, how many fish will there be in 5 years?
2. A herd of 100 moose live in a nature reserve. The moose population is doubling every 5 years. What will the population be in 25 years?
3. There are currently 300 bacteria in a petri dish. There will be 2052 bacteria in 33 minutes. What is the growth rate for the bacteria?
4. A town's population is decreasing at a rate of $8 \%$ annually. There are currently 45000 in the town. When will there be 20000 people in the town?
