NAME: ID #: Serial #:

1. The number of tickets issued by a meter reader for parking-meter violations can be modeled by a Poisson process with a rate parameter of six per hour. What is the probability that at least three tickets are given out during the coming half an hour?

2. A used car lot contains five Fords, four GM cars, and five Toyotas. If five cars are selected at random to be placed on a special sale, what is the probability that two are GM cars?

3. When a new machine is not functioning properly, 17% of the items produced are defective. Assume that we will randomly select **5** parts produced on the machine and that we are interested in the number of defective parts found. What is the probability that no more than two parts in the sample are defective?