Name: ID: Serial:

Question One (3 + 3 = 6-Points)

A used car lot has 15 cars. Five of these cars were manufactured in the U.S. and the remainder were made in other countries. If three cars are purchased,

a.   What is the probability that all three will be U. S. made cars?

b.   What is the probability that at least two of the three cars are U.S. made cars?

Question Two (3 + 6 = 9-Points)

Consider the following probability distribution for a random variable X:

X	- 2	0	2	3	4
P(x)	0.15	0.35	0.20	a	0.1

a.   Find the value **a**

b.   Find the expected value for the random variable Y = 3X-2