

Name:

ID #:

Section 4

Serial #:

Q1. Suppose in a certain shipment there are 4 scanners, 5 printers, and 6 computers. A sample of size 5 was drawn from the shipment. Answer the following:

a. If the sample was drawn *with replacement*, what is the probability that 3 of them will be printers?

b. If the sample was drawn *with replacement*, what is the probability that the first scanner will be the last one selected in the sample?

c. If the sample was drawn *withOUT replacement*, what is the probability that 2 of them will be printers and 2 will be computers?

- d. If the sample was drawn *withOUT* replacement, what is the expected number of scanners to get in the sample?

Q2. Suppose that printing mistakes, by some clerk, appear at the rate of 2 per page. Calculate the following:

- a. The probability that the clerk does at least 3 mistakes in 4 pages .
- b. The average number of printing mistakes that the clerk does in a booklet of a dozen of pages.

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