

8. Suppose that 30% of the applicants for a certain industrial job have advanced training in computer programming. Applicants are interviewed sequentially and are selected at random from the pool. Find the probability that the first applicant having advanced training in programming is found on the fifth interview.

9. A corporation has a pool of 6 firms, 4 of which are local, from which they can purchase certain supplies. If 3 firms are randomly selected without replacement, find the probability that at least one selected firm is not local.

10. The employees of a firm that manufactures insulation are being tested for indications of asbestos in their lungs. The firm is requested to send three employees who have positive indications of asbestos on to a medical center for further testing. If 40% of the employees have positive indications of asbestos in their lungs, find the probability that ten employees must be tested in order to find three positives.

11. A warehouse contains 10 printing machines, 4 of which are defective. A company randomly selects five of the machines for purchase. What is the probability that all five machines are non-defective?