

April 23, 2019

1. [5 points] You are just starting a new job and get to purchase a new computer and printer for your work. The IT guy casually mentions that sometimes the products arrive defective: the computers with a probability of $1/300$, while only $3/1000$ for the printer. What is the probability that both your new computer and printer are defective? (*You may assume these events are independent.*)

2. [5 points] Dr. Wigglesworth is going to randomly call on four students from class to answer various questions during the lecture. There are 30 students and 23 of them are women. If Dr. Wigglesworth never calls on the same student twice, what is the probability that he calls on four women during the lecture?

3. Determine the probability of the following events.

(a) [**3 points**] Tossing two coins and getting either one heads *or* two tails.

(b) [**3 points**] Rolling two dice and getting a sum of 4.

(c) [**4 points**] Tossing five dice and getting at least one 6.