Chapter, section and problem numbers refer to the 3rd edition of the Ghahramani textbook.

1. Section 8.1 #4.

2. A box of 5 fuses contains 2 that are defective. The fuses are tested one by one in a random order until the defective ones are found. Let $X$ denote the the number of tests until the first defective fuse is found, and $Y$ the number of tests until the second defective fuse is found. Determine the joint pmf of $X$ and $Y$, the marginal pmf of $Y$, and $E(Y)$.


4. Section 8.1 #9.

5. Section 8.2 #6.

6. Section 8.2 #13

7. Section 8.2 #14.