Section 4.4 — Extra Examples

1. Professor E. gives you 8 possible exam questions, and will choose (randomly, i.e., all possibilities are equally likely) 5 questions for the exam. You prepare answers to 6 of them, and have no idea how to answer the remaining 2. What is the probability that you can answer all 5 questions on the exam?

2. Out of the 31 people in this course, I want to form a 3-member task force composed of a president, a vice-president, and a designated dog-walker for my golden retriever. How many ways can this task force be formed?