

Foundations 12 – Probability and Combinatorics

Homework: Lesson #6 on Pg. 169: #1-6 (*Can do #7-17*)

Most of Lesson #6 is just doing the same calculations from Chapter 1 on Combinatorics. You should be able to do all of the questions, but I am going to focus on the ones that relate to probability and games the most closely.

Ex 1 You draw two cards from a standard deck **without** replacement. What is the probability that:

a) the first card is a Jack and the second card is a 3?

Using multiplication law | *Using combinatorics*

b) one card is a Jack and the other is a 3?

Using multiplication law | *Using combinatorics*

c) both cards are diamonds?

Using multiplication law | *Using combinatorics*

d) both cards are different suits?

Using multiplication law

Using combinatorics

Ex 2 You are trying to use your bank card, but you forgot your 4-digit PIN! Fortunately, you do remember that the first digit is a 3 and the second digit is an odd number. What is the probability you guess your PIN on your first try? (*NOTE: a digit can be 0-9*)

Using multiplication law

Using combinatorics