

Mathematics 1550H – Introduction to probability

TRENT UNIVERSITY, Summer 2014

Assignment #2

Deals

Due on Monday, 7 July, 2014.

A hand of five cards is dealt – randomly, one card at a time, without replacement – from each of two standard decks of 52 cards.

1. What is the probability that the two hands have exactly one card in common? [3]
2. What is the probability that the two hands have at least one card in common? [3]
3. Determine whether the events of “the two hands have at least one card in common” and “the first hand is all ♡s” are independent or not. [4]