# In-Class Worksheet <br> Discrete Math \& Functional Programming- CSCI 054- Spring 2024 Instructor: Osborn 

If you draw two cards from a perfectly-shuffled deck of cards, what is the probability that:

- both cards are hearts?
- the two cards have different suits?
- the two cards sum to 3 (i.e. you draw an Ace and a 2 )

I randomly choose a number $1,2, \ldots, 10$. Consider the following 3 events. Are any pair of them independent?

A: I choose an odd number
B: I choose a prime number
C: I choose a number (strictly) less than 5

