

# MATH 254 - Statistical Modeling and Applications - HW2

Tural Sadigov

## From Textbook 2

Introductory Statistics with Randomization and Simulation 1st Edition, by D. Diez, C.D. Barr, M. Cetinkaya-Rundel,

<https://www.openintro.org/book/isrs/>

## PROBLEMS

Note that the label (R Studio) means that you will need to use R Studio for those problems. But even if there is no such label, you are encouraged to use it whenever you can.

### Categorical variables

1. Problem 1.50 – page 60s

### Sampling distributions

2. (R Studio) Study the NBA salary from class, study the R files on Bbackboard relating to the NBA salaries and look at the dataset NBA salaries (again on Blackboard). Then simulate sampling distribution of SAMPLE MEDIAN of 100 NBA salaries.
3. Problem 2.12 – page 116

## **CLT, Normal distribution**

4. Problem 2.16 – page 117
5. Problem 2.28 – page 119
6. Problem 2.22 – page 118