STA101 Problem Set 2

Summer I, 2021, Duke University

Exercises from the OpenIntro book

Chapter 2 exercises 2.10, 2.21, 2.26, 2.34

Additional problems

Problem 5

In a class of 30 students, 29 of them submitted an assignment in time and 1 student submitted it later than the deadline. The TA graded the in-time assignments first and found an average score of 90 points with a standard deviation of 7.2 points. The late submission scored 76 points. Answer the following questions:

(a) Does the late submission score increase or decrease the average score?

(b) What is the new average?

(c) Does the late submission score increase or decrease the standard deviation of all the scores?

Problem 6

Refer to the background and the survey result table in Exercise 2.22 of the OpenIntro book (Page 69) and answer the following questions:

(a) What percent of these Tampa, FL voters identify themselves as liberals?

(b) What percent of these Tampa, FL voters are in favor of the guest worker option?

(c) What percent of these Tampa, FL voters identify themselves as liberals **and** are in favor of the guest worker option?

(d) What percent of these Tampa, FL voters who identify themselves as conservatives believe that illegal workers should leave the country? What percent of moderates share this view? What percent of liberals share this view?

(e) Do political ideology and views on immigration appear to be independent? Explain your reasoning.