5.4 Optional Assignment

Bayesian Inference

From a survey of 500 people, you estimate the proportion who support candidate A in the upcoming election to be 60%. The standard error for this estimate is 2%. From a previous forecast (not using this survey) you get a prediction that candidate A will win 51% of the vote, with the standard error of this forecast being 3% which accounts for both sampling variability and nonsampling errors.

Please note: You will have only 1 attempt to complete this assignment.

Multiple Choice

1 point possible (ungraded)

Using Bayesian method, we are going to combine the information from the survey and the previous forecast. What should be the prior distribution?

- 0 ± 0.01
- 0.5 ± 0.02
- 0.51 ± 0.03

- 0.6 ± 0.02

Submit You have used 0 of 1 attempt

Multiple Choice

1 point possible (ungraded)

Using Bayesian method, the Bayesian posterior forecast combining the survey and the forecast is:

- 0.538
- 0.546
- 0.564
- 0.572

Submit You have used 0 of 1 attempt