

Homework 2

MA506 Probability and Statistical Inference: Fall 2022

Grading Rubric

100 points

Question 1: (30 points)

1. Part 1: Correctly visualizing the dataset (5 points)
2. Part 2: Correctly plotting scatterplots (5 points)
3. Part 3: Most helpful + least helpful (2.5 + 2.5 points)
4. Part 4: Each part is worth 5 points (5x3 = 15 points)

Question 2: (70 points)

1. Part 1:(10 points)
 - Correct fit (6 points)
 - Correct R^2 (4 points)
2. Part 2: (20 points)
 - Degree 2,3,4,5 (4x4 = 16 points)
 - Correct R^2 for each (4 points)
3. Part 3: (10 points)
 - Best model (5 points)
 - Explanation (5 points)
4. Part 4: (10 points)
 - Correct CI (4 points)
 - Correct PI (4 points)
 - why is CI contained in PI (2 points)
5. Part 5 (20 points)
 - Each subplot has 3 points (6x3 = 18 points)
 - Explanation of the plots (2 points)