MATH 1342: Extra Credit for Homework 11

Reminders:

- Extra Credit questions are difficult and involve more work than a standard homework question.
- You will receive up to 10% additional points (not to exceed full credit) on the related Homework Assignment only. Keep in mind for an assignment graded out of 10 to 20 points, this is only 1 or 2 additional points.
- Unlike assigned homework questions, extra credit questions should not be brought to your instructor or to tutoring services for assistance.
- Correct Answers with valid explanation of your process will receive credit only.
- These are due the Sunday following their related Homework assignment by 11:59 pm.
- Submit Answers to https://forms.gle/yw89xJe8PBrqvF5J7 (Late Answers will not be accepted.)

For a certain state exam, the mean score is reported as 75 with a standard deviation of 7. A high school teacher believes students perform better than this. To verify, a sample of exam scores is collected and analyzed with a significance level of 5%. The teacher is thrilled to see that the conclusion is to reject the state's claim in favor of a higher mean score, with p-value of 2.6%. Unfortunately, one student, that scored a 95%, was discovered to have been cheating, and that score needed to be removed from consideration. The new data fail to reject the state's claim with the given alpha value. What was the sample's original and adjusted mean score and sample size?

[Give mean and sample size for both the original sample and the sample with the cheating student removed. All answers should be rounded to 4 decimal places.]