

ECE 341 - Homework #12

t-Test with a Single Population. Summer 2024

6-Card Poker

The computed odds of being dealt a full-house in 6-card poker are in homework set #2.

1) The result of four Monte-Carlo simulations with 100,000 poker hands are:

811 805 809 804

From these results, determine the 90% confidence interval for the odds of being dealt a full-house

2) The result of twenty Monte-Carlo simulations with 100,000 poker hands are:

811 805 809 804 837 830 841 770 889 821
850 754 786 763 754 855 785 724 815 823

From these results, determine the 90% confidence interval for the odds of getting a full-house.

6-Card Draw

The computed odds of getting a full house in 6-card poker with a draw step was found in homework #2

3) The result of four Monte-Carlo simulations with 100,000 poker hands are:

3747 3633 3764 3692

From these results, determine the 90% confidence interval for the odds of getting a full-house.

4) The result of twenty Monte-Carlo simulations with 100,000 poker hands are:

3747 3633 3764 3692 3760 3793 3778 3708 3786 3650
3664 3777 3744 3788 3739 3620 3701 3759 3848 3693

From these results, determine the 90% confidence interval for the odds of getting a full house.

Reaction Time

5) Go to the Human Benchmark Dashboard and record your reaction time

<https://humanbenchmark.com/tests/reactiontime>

6) From your results, determine the 90% confidence interval for your reaction time.

7) From your results, determine the probability that

- Your next trial will be less than 200ms
- Your average reaction time is less than 200ms