| Na | me Date | | | | | |
|--|--|--|--|--|--|--|
| | LAB 2F: The Titanic Shuffle Response Sheet | | | | | |
| Dir | ections: Record your responses to the lab questions in the spaces provided. | | | | | |
| Pre | eviously | | | | | |
| Th | e Titanic | | | | | |
| Based on the plot, do you believe that passengers who paid a higher fare on the Titanic v more likely to survive? Explain why and describe how certain you are of being correct. | | | | | | |
| | | | | | | |
| Th | e search begins! | | | | | |
| • | Based on the distribution of fares paid, which numerical summary might be preferred to describe the typical value? | | | | | |
| | | | | | | |
| • | What was the <i>typical</i> fare paid by survivors? Non-survivors? How much more did the typical survivor pay? | | | | | |
| | | | | | | |
| Do | the shuffle! | | | | | |
| Pu | t your simulations to use | | | | | |
| • | Using your shuffled data, answer the research question we posed at the beginning of the lab. | | | | | |

- Is there evidence to suggest that those who survived paid a higher fare than those who died?
- Write up your answer as a statistical analysis. Create a plot and explain how the plot supports your conclusion. Be sure to also explain why shuffling your data is important.

| Name | Date |
|------|------|
|------|------|

LAB 2F: The Titanic Shuffle Response Sheet

Comparing Mean Fares

| • | If we did this 500 times | , what do you | predict the | distribution of | of differences | will look like? |
|---|--------------------------|---------------|-------------|-----------------|----------------|-----------------|
|---|--------------------------|---------------|-------------|-----------------|----------------|-----------------|

• What does the shuffled data reveal? Does the answer to the research question below change when using the mean fares instead of the median fares?

Is there evidence to suggest that those who survived paid a higher fare than those who died?