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### 10.6 Practice A

1. A randomized comparative experiment tests whether pet therapy affects the mood scores of hospital patients. The mood scores range from 1 to 10 , with scores close to 10 indicating a good mood. The control group has eight patients and the treatment group, which receives the pet therapy, has eight patients. The table shows the results.

|  | Mood Score |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Control Group | 1 | 4 | 2 | 3 | 8 | 5 | 4 | 2 |
| Treatment Group | 3 | 9 | 4 | 7 | 3 | 6 | 2 | 9 |

a. Find the mean score of the control group.
b. Find the mean score of the treatment group.
c. Find the experimental difference of the means.
d. Display the data in a double dot plot.
e. What can you conclude?
f. Resample the data using a simulation.
g. Find the mean score of the new control group.
h. Find the mean score of the new treatment group.
i. Find the experimental difference of the new means.

