

Name\_\_\_\_\_

Date\_\_\_\_\_

## **LAB 4C: Cross-Validation**

### ***Response Sheet***

Directions: Record your responses to the lab questions in the spaces provided.

**What is cross-validation?**

**Step 1: train-test split**

- **Explain these lines of code and describe the training and test datasets.**

**Aside: set.seed**

**Aside: training-test ratio**

**Step 2: training the model**

**Step 3: test the model**

**Recap**

**Why cross-validate?**

**Example of overfitting**

- **Which model does a better job of predicting the 7 training points?**
  
- **Which model do you think will do a better job of predicting the rest of the data?**

**Example of overfitting, continued**

- **Which model does a better job of generalizing to the rest of the arm\_span dataset?**