

## **Mental Rotation**

All answers should be clearly identified (i.e. which question you are responding to) and must be typed. If you choose to do this lab, please hand in a paper copy on the day of the first exam, along with your other chosen lab assignment.

### **Section One**

Please answer all of the following questions

1. Extend Shepard and Metzler's findings to another imagery task. What would they predict about how long it would take to say how many windows were in a familiar room in which the windows were far apart from each other vs. how many windows were in a familiar room in which the windows were close together?
2. Some of you may not have obtained straight lines for the graph of the results or you may not have found that reaction times increase as angle of rotation increases. Give some reasons why this might have happened.
3. Describe an every day task that might depend on the same abilities that you used to do this demonstration
4. Use the plot of mean group reaction times as a function of angle of rotation for "mirror" and "same" trials to see if the results confirm Shepard and Metzler's findings.

### **Section Two**

Please choose two of the three questions to answer.

1. Practice improves performance on mental rotation tasks. How might this happen?
2. Do you think there is any other way of explaining Shepard and Metzler's findings that doesn't rely on mental rotation?
3. Create a short set of instructions using mental rotation techniques to help someone trying to improve an athletic skill like shooting baskets or serving in tennis or anything else that you can think of.