

## **How to score the Spatial Orientation Test**

What you have to calculate in each case is the difference in degrees between what the subject drew and what the correct answer (given in the answer key) is for this item in either the clockwise or counterclockwise direction (absolute error).

### **How to score each item:**

Make a transparency for each of the correct answers, overly the transparency of each correct item over the actual answer given by each subject to that item. Use a protractor to measure the smallest angle between the arrow given by the correct answer and the answer given by the subject (that is, the angle if you measure the SHORTEST way around the circle). Voila! That is the subject's score (absolute error) for that item. The angle should never be greater than 180 (if it is greater than 180 you have not measured the shortest way around the circle).

### **To Calculate a subject's score over all the items in the test:**

Average the scores (absolute error in degrees) for all the items on the test.

### **Issues that come up in Scoring this test:**

1. *The participant does not draw a straight line.* In this case you should score their answer as if they had drawn a straight line from the center of the circle to where the line they drew intersects the circumference of the circle
2. *The participant does not finish all the items.* Any item that they do not complete should be assigned a score of 90 degrees, which is chance performance (because angular error can range from 0 to 180 if someone responded randomly over many trials their average error would be 90 degrees). However if a participant completes less than  $\frac{3}{4}$  of the trials in the time given, we recommend that you replace that subject.
3. *A participant has an average error that is much greater than 90.* As 90 is chance performance, this suggests that the participant did not understand the instructions and should also be replaced.