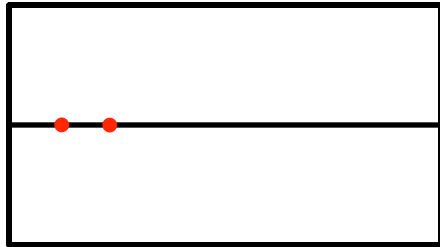# Sequential Presentation Interval Estimation

- Upon selecting this program, we (the experimenters) should be able to specify:
    1. How long each screen will be presented for, in milliseconds; we will need to have control over each screen individually
    2. Whether the distance between the two dots in screen 1 will be selected from the "short" or "long" set
    3. The number of trials that will run successively
- For each trial, the program should record:
    1. targetDistL: The location of the left dot relative to the left end of the line in screen 1
    2. targetDistR: The location of the right dot relative to the left end of the line in screen 1
    3. targetDist: The distance between the two dots presented in screen 1 (i.e. which distance was randomly selected from the sets listed below)
    4. loc1: The location of the dot relative to the left end of the line in screen 3
    5. touch: The location of the participant's touch relative to the left end of the line in screen 4
    6. trialNum: The location of the trial within the sequence of trials run successively (1, 2, 3, etc.)
    7. stimScreen, delay1, respScreen, dispScreen, delay2: How long screen 1, screen 2, screen 3, screen 5, and screen 6 were presented for, respectively (ms)
    8. blockLength: The number of trials run successively (should be the same as the last "trialNum")
    9. reactionTime: The time between when screen 3 is displayed, and when the participant touches the screen (ms)
    10. condition: A binary variable indicating whether the distance between the dots in screen 1 was selected from the "short" or "long" set
    11. retry: A three-category variable indicating whether a participant retried a trial, and why (wrong side or too far)
- The sets ("short" vs. "long") describe the possible distances between the centers of the two dots on screen 1
    1. The possible distances between the first and second dots in the "short" set (in centimeters) are: [2.0, 2.8, 3.6, 4.4, 5.2, 6.0, 6.8, 6.7, 8.4, 9.2, 10]
    2. The possible distances between the first and second dots in the "long" set (in centimeters) are: [6.0, 6.8, 6.7, 8.4, 9.2, 10, 10.8, 11.6, 12.4, 13.2, 14.0]
- Other notes:
    1. The mark on the line is recorded when the participant first touches the screen, not when they release their finger
    2. If participants do not respond quickly enough on a given trial, the experiment should advance to the next trial in the block, and record that the participant did not respond
    3. If the participant retries a trial and misses a second time, move to the next trial and record as missing data

1. A horizontal line is displayed across the center of the screen for the duration of the study. Two red dots (1 cm in diameter) appear for specified number of milliseconds. Their location on the line is random, but the distance between them is randomly selected from 1 of 2 pre-specified sets, each with 11 options.
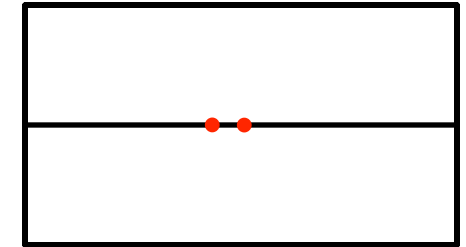
3. A red dot (1 cm in diameter) appears in a random location within the first 1/4 of the line.

5. Screen displays location of touch (in addition to the dot from screen 3) for a specified number of milliseconds.

2. Blank screen for specified number of milliseconds.

4. Participant touches the screen to the right of the dot on screen 3, attempting to reproduce the distance between the two dots on screen 1.

5.5. If participant's touch is too far away from the line (vertically), OR if participan touches to the left of the dot on screen 3:

Please try again!
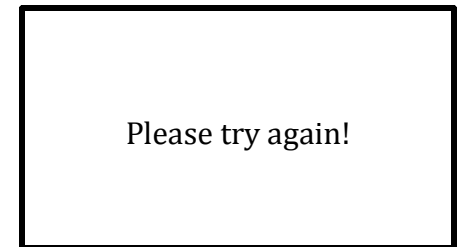
6. Blank screen for specified number of milliseconds.

7. Repeat *x* times, specified prior to running the program.