To demonstrate how the task works:

Each list is set up exactly the same. The only thing that changes is the stimuli. In this example, your instructed to make a decision (yes or no) about the left or right stimuli. Depending on the answer it multiples or exponentially increases the stimuli by the "reaction variable". In this case, yes = multiply, no = exponent. The *Left stimuli* represent the output from the reaction variable and the *right stimuli* represents a constant stimulus. For each list I have an in-line script that says - 1) if the response is yes, then multiply the left stimuli by "reaction" value and display on the screen; 2) if the response is no, the increase the value of the left stimuli exponentially by the reaction value and display on the screen; 3) Keep the right stimuli consistent. (This is a poor example, but I wanted to give you the idea of the task without posting the entire experiment).

Here is how each list works:

Instructions.

"Make a decision based on some question."

Trial 1:

Left Stimuli = 1; Right stimuli = 2; Response= "yes" Then multiply the left stimuli by the value the reaction: 2 x 2 = 4

Trial 2:

Left Stimuli = 4; Right stimuli = 2; Response= "yes". Then multiply the left stimuli by the value the reaction: $4 \times 8 = 32$

Trial 3:

Left Stimuli = 32; Right stimuli = 2; Response= "no". Then increase the value of the left stimuli to the power of the reaction value = $32 \land 14 = x$ (a really long number

Trial 4:

Left Stimuli = x; Right stimuli = 2; Response= "no". Then increase the value of the left stimuli to the power of the reaction value = $x \wedge 20 = y$ (another really long number)

Trial 5:

Left Stimuli = y; Right stimuli = 2; Response= "yes". Then multiply the left stimuli by the value the reaction: $y \times 26 = z$ (another really long number)

End
