Choices Over Risky Prospects

This is a task where you will choose between prospects with varying prizes and chances of winning each prize. You will be presented with a series of pairs of prospects where you will choose one of them. There are 100 pairs in the series. For each pair of prospects, you should choose the prospect you prefer. You will actually get the chance to play one of these prospects, and you will be paid according to the outcome of that prospect, so you should think carefully about which prospect you prefer.

Here is an example of what the computer display of such a pair of prospects will look like.

![Pie charts showing prospects with different chances and prizes.](image)

The outcome of the prospects will be determined by the draw of a random number between 1 and 100. Each number between, and including, 1 and 100 is equally likely to occur. In fact, you will be able to draw the number yourself using two 10-sided dice.

In the above example the left prospect pays ten dollars ($10) if the number drawn is between 1 and 48, pays thirty dollars ($30) if the number is between 49 and 84, and pays fifty dollars ($50) if the number is between 85 and 100. The red color in the pie chart corresponds to 48% of the area and illustrates the chances that the number drawn will be between 1 and 48 and your prize will be $10. The green area in the pie chart corresponds to 36% of the area and illustrates the chances that the number drawn will be between 49 and 84 and your prize will be $30. The black area in the pie chart corresponds to 16% of the area and illustrates the chances that the number drawn will be between 85
and 100. When you select the lottery to be played out the computer will confirm what die rolls correspond to the different prizes.

Now look at the pie on the right. It pays ten dollars ($10) if the number drawn is between 1 and 42, thirty dollars ($30) if the number is between 43 and 96, and fifty dollars ($50) if the number is between 97 and 100. As with the prospect on the left, the pie slices represent the fraction of the possible numbers which yield each payoff. For example, the size of the $30 pie slice is 54% of the total pie.

Each pair of prospects is shown on a separate screen on the computer. On each screen, you should indicate which prospect you prefer to play by clicking on one of the buttons beneath the prospects.

After you have worked through all of the pairs of prospects, raise your hand and an experimenter will come over. You will then roll two 10-sided dice to determine which pair of the 100 prospects you chose will be played out. At the end of these instructions we will illustrate how these dice are used to select a random number. Since there is a chance that any of your 100 choices could be played out for real, you should approach each pair of prospects as if it is the one that you will play out. Finally, you will roll the two ten-sided dice again to determine the outcome of the prospect you chose.

For instance, suppose you picked the prospect on the right in the above example, and it was the pair chosen to be played. If the random number from your rolls of the dice was 7, you would win $10; if it was 90, you would win $30. If you picked the prospect on the left and drew the number 7, you would win $10; if it was 90, you would win $50.

Therefore, your payoff is determined by three things:

- which prospect you selected, the left or the right, for each of these 100 pairs;
- which prospect pair is chosen to be played out in the series of 100 such pairs using the two 10-sided dice; and
- the outcome of that prospect when you roll the two 10-sided dice again.

Which prospects you prefer is a matter of personal choice. The people next to you may be presented with different prospects, and may have different preferences, so their responses should not matter to you or influence your decisions. Please work silently, and make your choices by thinking carefully about each prospect.

All payoffs are in cash, and are in addition to the show-up fee that you receive just for being here, as well as any other earnings in other tasks from the session today. Here is a brief explanation of how the dice will be used to generate random numbers.