## Welcome

Welcome to this experiment. These instructions are to help you understand what you are being asked to do during the experiment and how your decisions affect your final payment. Please switch-off your mobile phone and do not communicate the other participants. The experiment is simple and gives you the chance to earn a considerable amount of money, which will be paid to you after you have completed the experiment. The payment described below is in addition to the participation fee of £5.00 that you will be paid independently of your answers.

## Tasks

In this study, there is a series of 29 tasks. Each task involves choosing between Options "A" and "B" with varying prizes and chances of winning. Both options yield a prize, depending on draws of random numbers, performed by the computer (more details below). Once you have completed these tasks, one of the 29 tasks will be randomly selected by the computer to be played out for real. There are no correct or wrong answers so always choose the option you prefer.
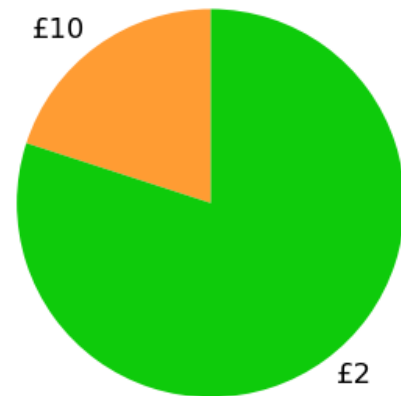
Here is an example of what the computer display of such a pair of options will look like:

£15

£7
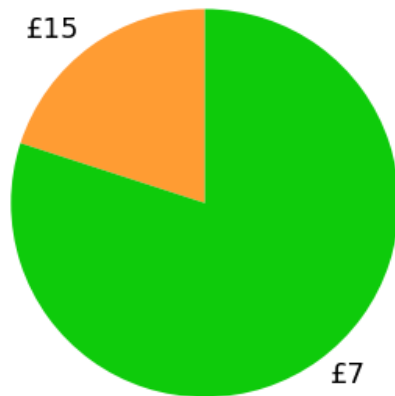
Chance of winning £15 is 20%

Chance of winning £7 is 80%

£10

£2

Chance of winning £10 is 20%

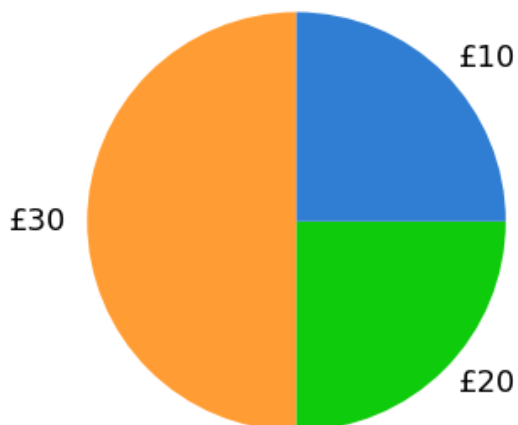Chance of winning £2 is 80%

Select A

Select B

In this example, option "A" yields £15 with chances 20% and £7 with chances 80%, while option "B" yields £10 with chances 20% and £2 with chances 80%. The outcome of the options will be determined by the draw of a random number, by the computer, between 1 and 100. Each number between, and including, 1 and 100 is equally likely to occur.

For instance, if you choose A in that e above example, and the random number that the computer draws is less than 20, then you will win £15. If the number is more than 20, then you will win £7. If instead you choose B and the random number is less than 20, then you will win £10, otherwise £2.

To visualise the chances of winning each prize, we illustrate them with the aid of a pie chart. In option A for example, the orange area corresponds to 25% chance, while the green area corresponds to 75% chances. The tasks will vary in the number of prizes they offer, and this can be anything between 2 and 5 prizes.
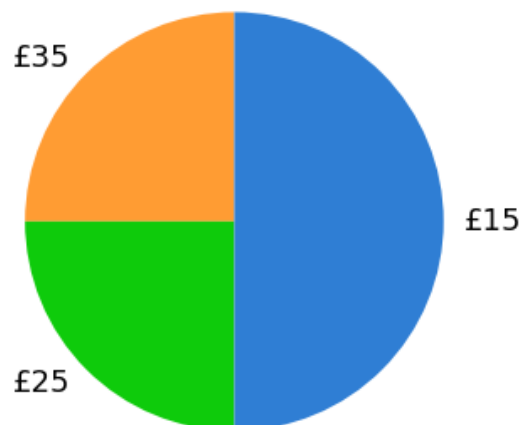
An example of a pair of options with 3 potential prizes follows:

£10

£30

£20

£35

£15

£25

Chance of winning £30 is 50%

Chance of winning £20 is 25%

Chance of winning £10 is 25%

Chance of winning £35 is 25%

Chance of winning £25 is 25%

Chance of winning £15 is 50%

| Select A | Select B |
|----------|----------|

In this task, option A yields £30 with chances 50%, £20 with chances 25% and £10 with chances 25%, while option B yields £35 with chances 25% , £25 with chances 25% and £15 with chances 50%.

Suppose you choose option A in this task is to be played for real at the end of the experiment. Remember that your prize depends on the random number that the computer draws. In that particular example, if the number is:

 less or equal to 50, then the prize will be £30 (50 corresponds to the chances of winning £30)

more than 50 and less or equal to 75, then the prize will be £20 (this corresponds to the chances of winning £20)

more than 75, then the prize will be £10 (this corresponds to the chances of winning £10)


On the other hand, suppose you choose option B. In that particular example, if the number is:

less or equal to 25, then the prize will be £35 (25 corresponds to the chances of winning £35)

more than 25 and less or equal to 50, then the prize will be £25 (this corresponds to the chances of winning £25)

more than 50, then the prize will be £15 (this corresponds to  the chances of winning £15)


An example of a pair of options with 4 and 5 potential prizes follows:
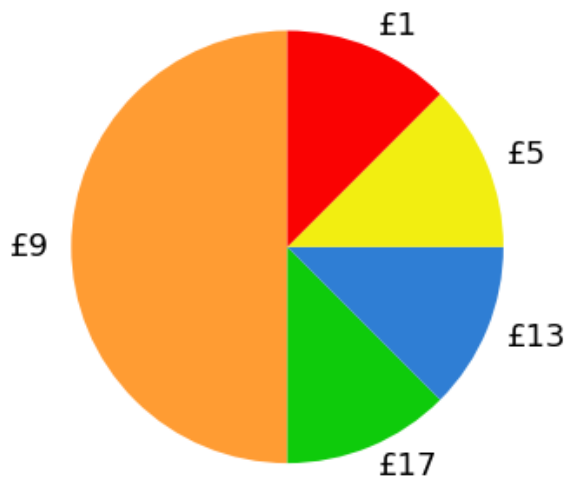
Chance of winning £9 is 50%

Chance of winning £17 is 12.5%

Chance of winning £13 is 12.5%

Chance of winning £5 is 12.5%

Chance of winning £1 is 12.5%

Chance of winning £15 is 25%

Chance of winning £3 is 25%

Chance of winning £11 is 25%

Chance of winning £7 is 25%

Select A

Select B

Again, winning a prize from an option depends on the random number draw. Suppose that this task was to be played for real and you have chosen option B. Suppose that the random number is 56. In that case, the payoff would be £11 since 56 is greater than 25 (25% chances of getting £15), it is greater than 25 and less than 50 (chances of getting either £3) and it is greater than 50 and less than 75 (chances of getting £11).

**Specifying the Chances**

For the tasks described above, draws of random numbers from the computer are needed to determine the chances with which each prize can be obtained. Before the pandemic, we would ask you draw a number from 1 to 100 from a bag with plastic chips. To minimise contact, we have programmed the software to perform this task for us. The software is using a random number generator algorithm, and makes draws of virtual numbered chips, with equal chances for any number to be drawn. For the problem to be played for real, the software will randomly draw one number from 1 to 29 with equal chances (i.e. each task has a 1/29 chances to be drawn and played out for real)[1].

**Payment**

Once the random draw of the problem to be played for real has been made, the software will recover the details of this task, along with your choice. Then, you will be asked to draw a number, which will determine your prize. The software will calculate and display your payment on the screen. Remember that this amount will be paid in addition to the £5 show-up fee.

At the moment we are unable to pay in cash, so the payment will be completed in the form of a bank transfer. Once all sessions are completed, your details will be provided to the LUMS Finance Team who will send the payments via Agresso in due course. If your details are not in the system, you can provide them following the links below:

UK bank accounts https://www.e-res.lancaster.ac.uk/OnlineDebitCredit/
Non UK bank account https://www.e-res.lancaster.ac.uk/internationalpayments/

If you have any questions please feel free to ask any of the experimenters for clarifications.

When you are ready, please close this document and you can start the experiment.

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[1] If you are familiar with the Python programming language, the software is using the inbuilt function of the random module in Python3, *randint() and uniform().* We are happy to provide you with the source code of the software in case you want to confirm.

Many thanks again for your participation.

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