

COIN TOSS IN EXCEL – DEMO NOTES

Student instructions:

1. Simulate a fair coin toss in Excel 20 times.
 - a. If you get more heads than tails, you win; and vice versa for more tails. It's a tie if you get the same number of heads and tails.
2. Repeat this exercise for 200 rounds.
 - a. If \$10 is wagered for each round, how much have you won and lost? How much money was exchanged in total?

Teaching notes:

1. Give the student a few minutes to set up the workbook independently. If they need assistance they can consult the `cointoss-template` worksheet.
2. Remind them that a coin toss is essentially randomly selecting either a heads or a tails; random selection of one state or another is possible in Excel, and calculating the winnings will be a combination of conditional logic and random number generation.

Solution file: [cointoss-demo.xlsx](#)

Topics utilized for this demo:

- `RANDBETWEEN()` to check whether a number is 0 or 1
- `IF()` to determine whether a toss is heads or tails, and subsequently a +\$10 or -\$10
 - `COUNTIF()`, `SUMIF()` to count and sum total heads/tails, wins/losses
- `ABS()` to calculate the total amount of money exchanged

