

Creating a dice game simulation

Use a spreadsheet to simulate 10 turns in each of the following dice games. Use a new sheet in the same file for each game.

Game 1

On each turn, you roll 3 dice. You score a point for each die which shows 5 or 6. Total your score after 10 turns.

Game 2

On each turn, you roll 3 dice. If any die shows 1, you get an additional roll. Your score is the highest number you rolled this turn. Total your score after 10 turns.

Game 3

On each turn, you roll 3 dice. You score 10 points if all three dice show 5 or 6. You lose 1 point if none of the dice shows a 5 or 6. Total your score after 10 turns.

Useful functions

```
=randbetween(low, high)
```

```
=randbetween(1,6)
```

Generate a random integer between *low* and *high* (inclusive).

```
=sum(range)
```

```
=sum(A2:A7)
```

Add up the numbers in the indicated *range*.

```
=if(conditional, value if TRUE, value if FALSE)
```

```
=if(A2>=5,1,0)
```

Evaluate the *conditional*. The current value depends on whether the *conditional* is *TRUE* or *FALSE*.

```
=max(range)
```

```
=max(A2:A7)
```

The maximum value in the indicated *range*.