Consider a mini-game

The player see 12 boxes.

The player opens box after box until a "Game over sign" is found.

The boxes contain various rewards that are randomly divided between the boxes.

The contents are:

1x €100

2x €20

5x €5

1x "Extra life". If this reward is picked, the next "Game over sign" is nullified.

3x "Game over sign" - ends the game.

When the game is over, the player gets an additional reward. It is chosen randomly from four options:

- €5
- €10
- €20
- "Second chance" - return to the game to the previous state. The next time the game is over, the "Second chance" option is disabled (only the three above options are available)

Task:

Find out the average euro value rewarded when playing one round of this game, using simulations or exact calculations

Technical requirements

Use object oriented approach with Java 8 programming language and maven.