

Puzzle

Group Meeting

January 16, 2017

You have 52 playing cards, which contain 26 red and 26 black. You play games with the following rules.

- You draw cards one by one.
- The payoff rule is that a red card pays you a dollar and a black one fines you a dollar.
- You can stop any time you want.
- Cards are not returned to the deck after being drawn.

Question:

What is the optimal stopping rule in terms of maximizing you expected payoff?

Reference Answer:

<http://puzzles.nigelcoldwell.co.uk/fourteen.htm>

<https://drive.google.com/file/d/0B0E4VF1FjnCuQVphRkEwY1JtSlk/edit>