

Imagine you were given the chance to win some money...
and imagine you had nothing to lose...



Imagine you arrive in a room where you are given £128 and six cards (3 red winning cards and 3 black losing cards).

You are asked to choose and lay the cards down, one at a time.
You can decide in which order to lay them down.

At each stage you must bet exactly half the money that you have available.

If you select and play a black card you lose the money you bet.

If you select and play a red card you receive double the money you bet (ie. you get the money you bet back, plus that amount again, so if you bet £64 and win, your total will increase by £64).

If you end up with more money than you started with you get to keep the profit.

What's the best order for laying down the cards?

What will your strategy be when you are offered 4 or 5 red winning cards?
Draw some conclusions on what strategy to adopt and try to justify your findings.