

SHOULD I PLAY?

Last week I got a B on my probability test, and Ms. McGill has offered to play a game with me that might lower or raise this grade. I don't know whether I should take this offer or not.

Here's how it works: Ms. McGill will play a card game with anyone who wants to try to raise the test grade. If the student wins, the grade goes up 1 letter; if Ms. McGill wins, the grade goes down 1 letter. The student and Ms. McGill each start with 50 marbles. In the center of the table is a pack of 8 cards and a can in which the winner of each round of the game puts a marble. In the pack of cards are 2 each of the ace, jack, queen, and king. The pack is shuffled and two cards are drawn at random. If the cards are not identical, Ms. McGill puts a marble into the can, but if the cards *are* identical, the student puts 5 marbles into the can. The 8 cards are reshuffled after each round, and whoever puts all of his or her marbles into the can first is the winner.

Should I play or not?