



© 1997–2004, Millennium Mathematics Project, University of Cambridge.

Permission is granted to print and copy this page on paper for non-commercial use. For other uses, including electronic redistribution, please contact us.

May 2005

Regulars



Puzzle page



Bottom dollar



You're in a glitzy casino in Las Vegas. Having tried your hand at everything from Roulette to Black Jack, you've managed to lose most of your money and have only one dollar left.

What's worse, with all the champagne and everything, you've misbehaved and the management has made it very clear that you're not allowed any more games. But you need two dollars to get the bus back to the hotel.

Two shady-looking characters at the bar offer you a game: they have a pile of 15 stones. Each of you in turn is to take your choice of 1, 2, 3, 4 or 5 stones from the pile. The person who takes the last stone gets one dollar from the person who drew previously, and the third person neither wins nor loses.

You're to draw first. You're sure that both of the other players will play to their best personal advantage and won't make any mistakes. Should you agree to play the game?

If you are stumped by last issue's puzzle, here is the solution.

For some challenging mathematical puzzles, see the NRICH puzzles from this month or last month.



Plus is part of the family of activities in the Millennium Mathematics Project, which also includes the NRICH and MOTIVATE sites.