Problem of the Week Grade 7 and 8

Fair Game

Seven identical balls are numbered 1 to 7 and then placed in a bag. The bag is shaken so the balls are mixed up. A player draws four of the balls from the bag and then determines the sum of the numbers on the balls. The player wins the game if the sum of the numbers on the balls is odd.

Determine the probability that a player wins the game. Express your answer in fraction form.



