In a certain state lottery, a lottery ticket cost $6. In terms of the decision to purchase or not to purchase a lottery ticket, suppose that the following payoff table applies:

|  |  |
| --- | --- |
|  | State of nature |
| Decision alternative | Wins s1 | Lose s2 |
| Purchase lottery ticket d1 | 250,000 | -6 |
| Do not purchase lottery ticket d2 | 0 | 0 |

1. A realistic estimate of the chances of winning are 1 in 300,000. Use the expected value approach to recommend a decision.
2. If a particular decision maker assigns an indifference probability of 0.00004 to the $0 payoff, would this individual purchase a lottery ticket? Use the expected utility to justify your answer.