Q3**.** Determining EMV & EOL

A vendor at the a baseball stadium must decide whether to sell ice cream or soft drinks at today’s game. The vendor believes that that the profit will depend on the weather. On the basis of her past experience at this time of year, the vendor estimates the probability of warm weather as 0.60 and cool weather as 0.40. The payoff table is as follows:

|  |  |  |  |
| --- | --- | --- | --- |
|  | Action | | Probability |
|  | Sell Soft Drinks | Sell Ice Cream |
| Cool weather | $50 | $30 | 0.40 |
| Warm Weather | $60 | $90 | 0.60 |

A)  Compute the Expected Monetary value (EMV) for each action.

B)  Compute the Expected opportunity loss for each action

C) Compute the Return to Risk Ratio (RRR).

D) On the basis of the results of (A) – (C), which action should the vendor take – sell soft drinks or ice cream? Why?