Question #18023 9. I had two groups of persons, one group having 259 and another 260 individuals. the group first were treated with a medicine for a particular ailment, and 95 persons get alright i.e 36 per cent.

the second group consisting of 260 individuals was not treated with any medicine. but the persons recovered from the same ailment were 72 individuals i.e 27.6 per cent. now i had to find out the probability.

Solution I guess that we are to find probability of being recovered from some ailment. Denote by H_1 ='not being treated by any medicine', H_2 ='being treated by that medicine' and A =.'to recover from a disease' Hence $P(H_1) = 259/519$ and $P(H_2) = 260/519$ and $P(A|H_1) = 0.276$, $P(A|H_2) = 0.36$, by the rule of total probability one gets that $P(A) = 259/519 \cdot 0.276 + 0.36 \cdot 260/519 \approx 0.318$.