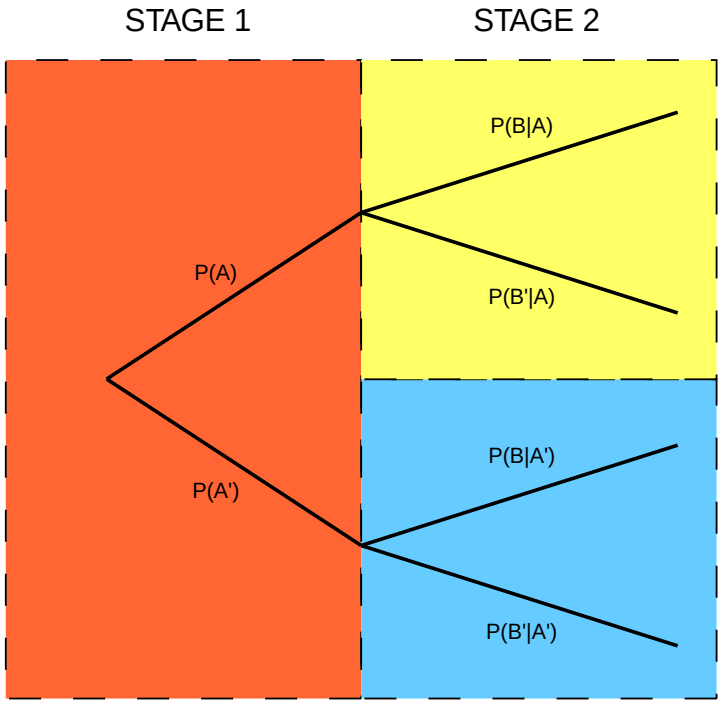
PROBABILITY TREES - A GUIDE



In any stage section the branch probabilities add up to one.
The sections are shown in different colours.

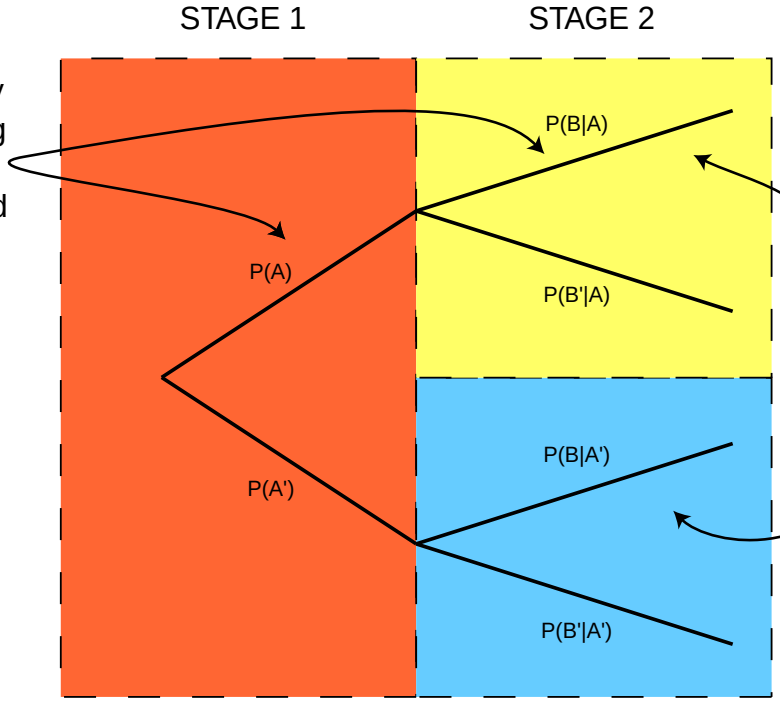
In any stage section the branches are mutually exclusive.
If you choose one you can't choose the other.

These branches assume A has happened

These branches assume A has not happened

The probabilities for the stage 2 branches depend on which stage 1 branch you choose

Probability Trees show CONDITIONAL probability



To find the probability of A AND B occurring we multiply the probabilities P(A) and P(B|A) together.

P(A AND B) = P(A)P(A|B)

B occurs in the second stage in two places.

The probability of an event occurring in the second stage is shared across more than one branch.