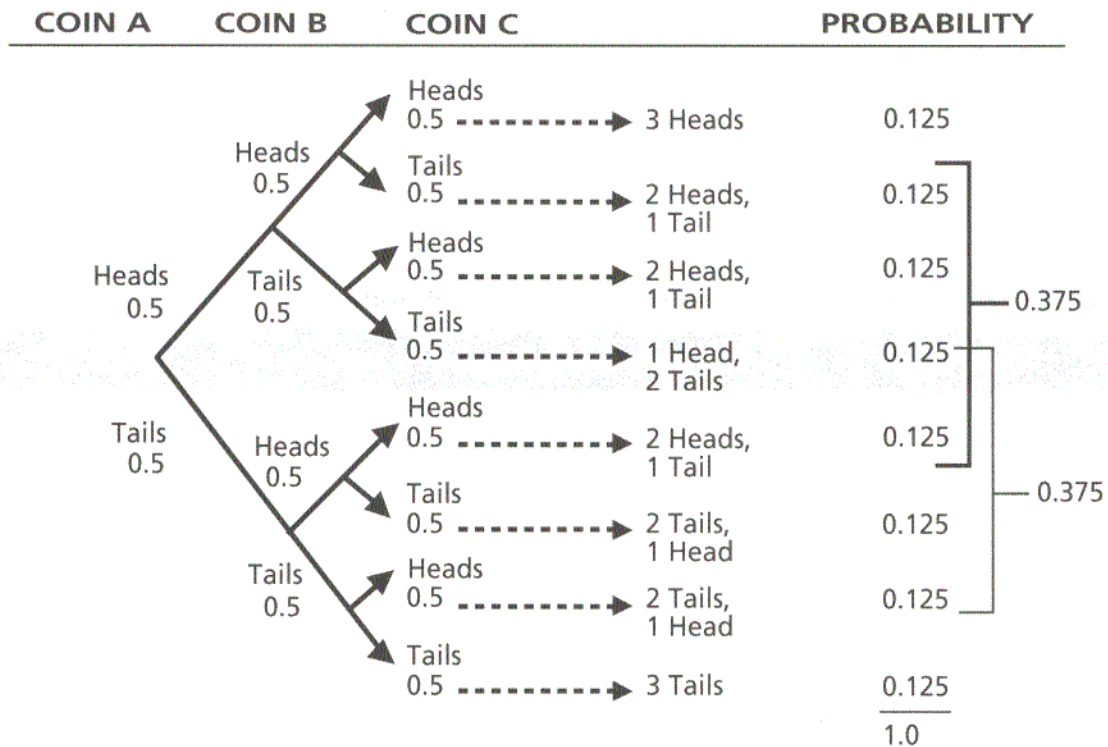
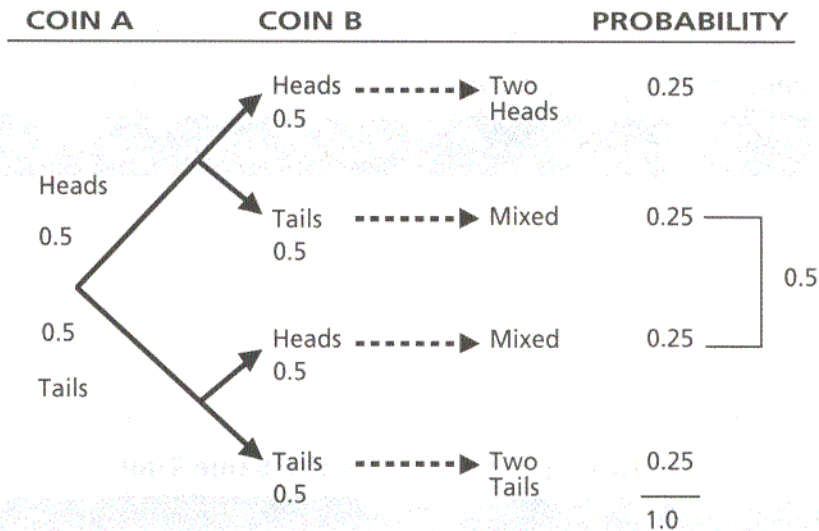


Tree Diagrams



Doing the calculations: Multiply the probabilities along each path to calculate the overall probability of the outcome. For example, in the top diagram, the probability of getting 2 heads is $0.5 \times 0.5 = 0.25$. In the bottom diagram, the probability of getting 2 heads and 1 tail is $0.5 \times 0.5 \times 0.5 = 0.125$, AND there are three ways of getting this outcome, so we add $0.125 + 0.125 + 0.125$ to get an overall probability of 0.375. The sum of **all** outcome probabilities always equals 1.