4.28

A sequence of independent subexperiments is conducted. Each subexperiment has the outcomes "success", "failure", or "don't know". IfP[success] = 1/2 and P[failure] = 1/4, what is the probability of 3 successes in 5 trials?

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Binominal Probability Law i kullandım
3 tane outcomes var.
success", "failure", or "don't know"

P[success] =1/2
P[failure] = 1/4

1-1/2-1/4=1/4 burdan P[dontknow]=1/4 olur

P[dontknow]=1/4

P[3 successes in 5 trial] = $\binom{5}{3}*(p^3)*(1-p)^2$
p=P[success]=1/2;

>> 10*(0.5^3)*(0.5^2)

ans =

0.3125

~ %31.2