Answer on Question #38729, Math, Statistics and Probability

A chartered accountant applies for a job in two firms X and Y. He estimates that the probability of his being selected in firm X is 0.7 and beig rejected in Y is 0.5 and the probability that atleast one of his applications rejected is 0.6. What is the probability that he will be selected in one of the firms?

	Rejected	Accepted
Firm X	1-0.7=0.3	0.7
Firm Y	0.5	1-0.5=0.5
	0.6	0.4

Probability that he will be selected should calculated by multiplying probability that he will be selected by Firm X with general probability that he will be accepted and sum it with multiplying probability that he will be selected by Firm Y with general probability that he will be accepted

Probability that he will be selected in one of the firms is 0.4*0.7+0.4*0.5=0.28+0.2=0.48