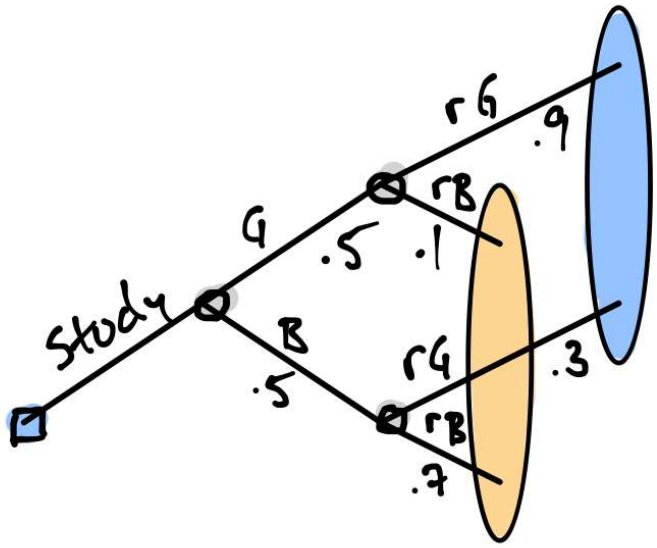
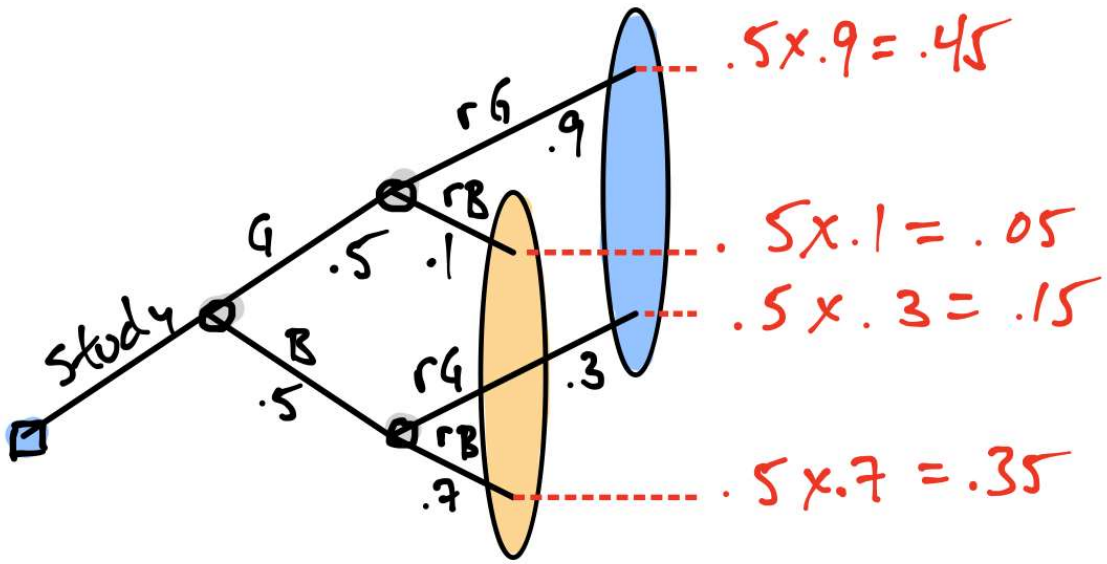
Solution: Conditional probabilities

Relevant part of the decision tree:



Computing the probabilities of the information set endpoints:



Calculating the probabilities of the information sets:

Prob rG: 0.45 + 0.15 = 0.6

Prob rB: 0.05 + 0.35 = 0.4

Calculating the conditional probabilities:

Prob G if rG: 0.45/0.6 = 0.75

Prob B if rG: 0.15/0.6 = 0.25

Prob G if rB: 0.05/0.4 = 0.125

Prob B if rB: 0.35/0.4 = 0.875

Impact of information: reduces uncertainty

	Prob G	Prob B	Change
Before test:	50%	50%	
After test if **rG**:	**75%**	25%	Increased confidence it's G
After test if **rB**:	12.5%	**87.5%**	Increased confidence it's B