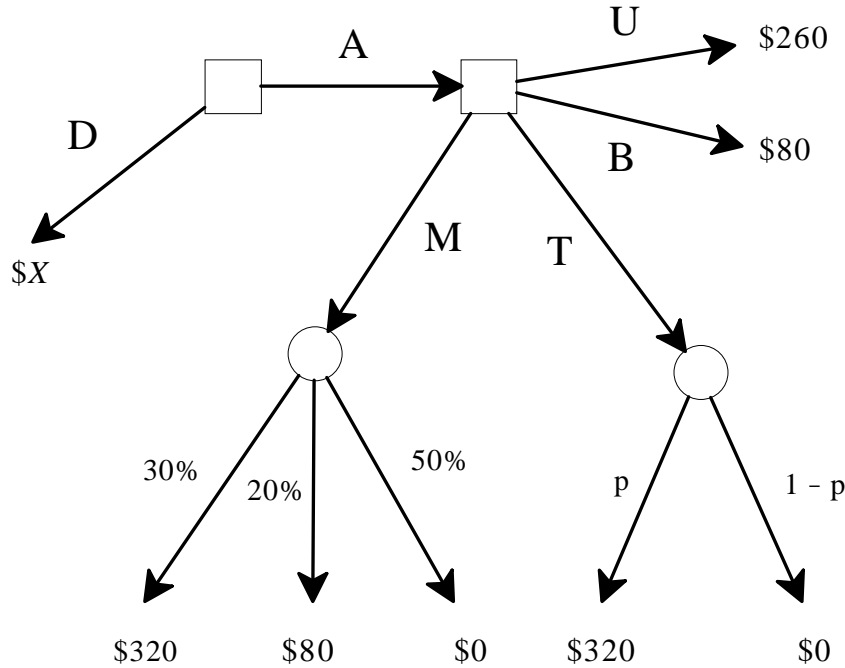


HOMEWORK # 2 (for due date see web page)

Julia and John prefer more money to less and satisfy the axioms of expected utility. Each of them faces the following decision.



- (a) Suppose that Julia is risk neutral. If she chooses A and then U , what can we deduce about the possible values of X and p ?
- (b) Suppose that $X = 0$, $p = 0.9$ and John starts by choosing A . Then he says that he is indifferent between U and T and he is indifferent between M and B .
- (b.1) Is he risk neutral, risk averse or risk loving?
- (b.2) Construct his normalized von Neumann-Morgenstern utility function.
- (b.3) Which of the actions U , T , M and B will he choose?
- (c) Suppose that John has the utility function calculated under (b.2). Suppose now that instead of the above decision tree he is faced with a choice between $\$80$ for sure and the lottery $\begin{pmatrix} \$320 & \$260 & \$80 & \$0 \\ 0.1 & 0.1 & 0.3 & 0.5 \end{pmatrix}$. What will he choose?