**3.3.3 Decision trees**

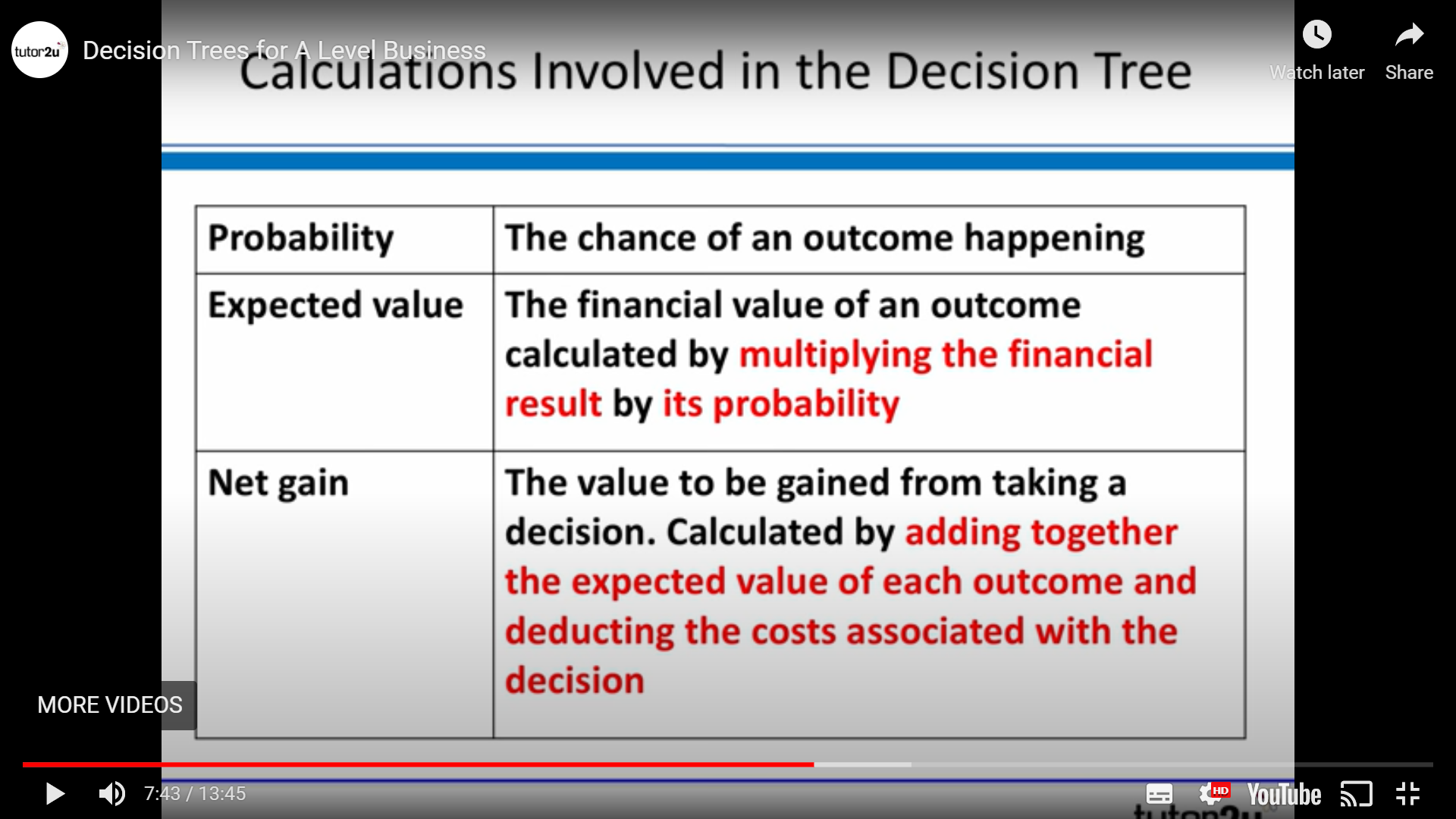
a) Construct and interpret simple decision tree diagrams

b) Calculations and interpretations of figures generated by these techniques

c) Limitations of using decision trees

**How the decision tree works**

* A decision tree traces an alternative outcome of a decision, the results can be compared and the business can decide which option would be the most profitable
* This is a quantitative approach (means it uses numbers) it is pictorial as it’s in the shape of a tree and it predicts the best bet outcome so a business knows what to spend its money on
* The data is usually based on historical data from the business, for example they would know the probability of success of launching a new product would be 20% based on previous product launches and how well they had turned out



**Limitations**

1. Decision trees are based on predicted data of the potential impact of a decision
2. Decision tree does not take into account unforeseen costs and circumstances
3. Probabilities and net outcomes are all estimates
4. Using decision trees might fit with the culture exhibited by the business but this is likely to be overridden by the need to act quickly, which would suggest the decision trees are not that useful in some situations
5. Large degree of uncertainty about any situation that a decision tree might be used for, so the benefits of adding numbers to uncertainty e.g. 58% might not be correct

