# Exponential and logarithmic complexity classes

- If every possibility is searched, then this is an exhaustive search. This is the result of an exponential algorithm.
- For example using truth tables. If there is 1 variable, then you need 2^1. 2 variables then 2^2 and 3 variables 2^3 and so on. This is an exhaustive search.
- Examples are stisfiability tester (truth tables) or subset sum, like the knapsack example from lecture one. To check all results to get to the best.
- As this is exponential 2^n. This gets really big.