List of Topics:

List of Topics: Probability, Properties of Probability, Inclusion/Exclusion, Distribution functions, Uniform Distribution, Binomial Distribution, Bernoulli Trials, Basic Combinatorics, Permutations, Combinations, Birthday Problem, Independence (of Events and of Random Variables), Conditional Probability, Bayes Formula, Law of Total Probability, Monty Hall Problem, Simpson's Paradox, Expected Value, Conditional Expectation, Variance, Properties of Expected Value and Variance

Good Examples to look at: Birthday Problem, Monty Hall Problem, Hat Check Problem (Expected Value and Variance), Poker Hands, Your homework problems, Online problems

This is only a guide, not a complete list.