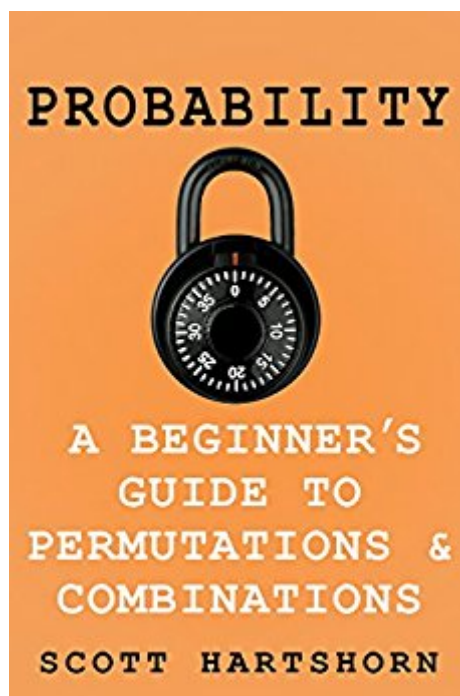




The book was found

# Probability - A Beginner's Guide To Permutations And Combinations: The Classic Equations, Better Explained



## Synopsis

Permutations And Combinations – Better Explained

This book gives examples of how to understand using permutations and combinations, which are a central part of many probability problems. The focus of this book is on understanding why the permutation and combination equations are what they are, which ends up making them a lot easier to understand, remember, and expand than simply memorizing the equations. Permutations and combinations is a subject usually makes up a chapter in most statistics text books, but it is a chapter that doesn't do the subject its proper justice. Most chapters on this subject start and end with memorizing the permutation and combination equations, and miss the deeper understanding of them and also skip over the permutation and combination problems that can't be solved with those equations directly.

What Kind Of Problems Do Many Other Texts Skip?

The permutation & combinations equations are great. Fairly easy to use, and easy to look up if you forget them and aren't in an exam. If you get a problem like, "You have 20 boxes but can only fit 15 in your truck, how many different combinations of boxes can you take?" It is straight forward to apply the combination equation of  $\frac{n!}{k! (n-k)!}$ . But how would you solve the problem of "You have 20 boxes, and 4 trucks that can fit 6, 5, 4, 3 boxes, how many different ways can the trucks be loaded? Assume it matters what box goes on which truck, but not the order it is loaded within the truck." The application of the combination equation to that second problem is not obvious. This book walks through how that problem would be solved, and it turns out to be relatively simple and intuitive.

Feedback From Early Reviewers

Several of the early reviewers expressed an interest in having a longer book, and a wider variety of examples. Consequently in this version I have added examples for how combinations & permutations relate to the lottery, the traveling salesperson problem, the odds of getting a flush in Texas Hold'em, the classic urn problems, as well as the binomial theorem. A big thank you for those suggestions!

What Motivated This Book?

I learned the permutation and combination equations in an early college math class, and have used them over the years and never had reason to revisit them looking for a deeper understanding. However after taking a programming challenge for a large tech company recently, challenging permutation & combination problems frequently appear, and the simple equations simply are not sufficient, a deeper understanding is necessary. Consequently this book also devotes a large section to an example permutation problem of the kind that you might find in a programming challenge. Those problems are frequently in programming challenges because permutations are an easy way to ensure that naïve brute force solutions can't solve the problems in a reasonable amount of time, and that a more elegant understanding of the math is required.

## Book Information

File Size: 2817 KB

Print Length: 55 pages

Simultaneous Device Usage: Unlimited

Publication Date: October 6, 2016

Sold by: Digital Services LLC

Language: English

ASIN: B01LX4YQSY

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Enabled

Lending: Not Enabled

Screen Reader: Supported

Enhanced Typesetting: Enabled

Best Sellers Rank: #29,626 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #2 in Kindle Store > Kindle Short Reads > 90 minutes (44-64 pages) > Science & Math #4 in Kindle Store > Kindle eBooks > Nonfiction > Science > Experiments, Instruments & Measurement > Experiments & Projects #17 in Kindle Store > Kindle eBooks > Nonfiction > Science > Mathematics > Applied > Probability & Statistics

## Customer Reviews

Good, but would pay more for a couple more examples. Liked the writing style, and link to blog and code for example.

This is a fun little introduction to combinatorics. The example problems are thoroughly explained. Would like to see more urn problems.

How can you argue with free? Great math review.

The author writes clearly and succinctly. He uses examples to help make learning the concept easier.

A bit light on, I was expecting more.

Great book as a refresher on some basic mathematical concepts. I'd recommend it to anyone wanting to read an easily understandable book on these topics.

This is a pleasant read and it is very interesting. The sketches or illustrations help. I enjoyed this book. It helped me know the subject even better:)

It is a very good book easy to read and follow but I found that is necessary to give more examples.

[Download to continue reading...](#)

Probability - A Beginner's Guide To Permutations And Combinations: The Classic Equations, Better Explained Probability with Permutations and Combinations: A Deeper and More Thorough Look at the Fundamental Equations Probability: Mastering Permutations and Combinations Probability: Mastering Permutations and Combinations (TONS OF EXAMPLES) Probability: 2 Manuscripts â “ Probability with Permutations and Markov Models Ways of Counting: All the Counting Methods beginning with Permutations and Combinations (Quick Review and Preview Series in Math and Science Book 2) Math Made Easy: Combinations and Permutations Numerical Partial Differential Equations in Finance Explained: An Introduction to Computational Finance (Financial Engineering Explained) Heavy Bag Combinations: The Ultimate Guide to Heavy Bag Punching Combinations (Heavy Bag Training Series Book 2) Ballet Barre & Center Combinations: Volume II: Music (Ballet Barre and Center Combinations) MMA WOD - Combinations: The Seven Deadly Boxing Combinations - And How To Use Them Perennial Combinations: Stunning Combinations That Make Your Garden Look Fantastic Right from the Start (Rodale Garden Book) Perennial Combinations: Stunning Combinations That Make Your Garden Look Fantastic Right from the Start Quantum Probability (Probability and Mathematical Statistics) Calculus, Vol. 2: Multi-Variable Calculus and Linear Algebra with Applications to Differential Equations and Probability Transformations Of Coordinates, Vectors, Matrices And Tensors Part I: LAGRANGEâ™S EQUATIONS, HAMILTONâ™S EQUATIONS, SPECIAL THEORY OF RELATIVITY AND CALCULUS ... Mathematics From 0 And 1 Book 16) Differential Equations and Boundary Value Problems: Computing and Modeling (5th Edition) (Edwards/Penney/Calvis Differential Equations) [ Differential Equations, Dynamical Systems, and an Introduction to Chaos [ DIFFERENTIAL EQUATIONS, DYNAMICAL SYSTEMS, AND AN INTRODUCTION TO CHAOS BY Hirsch, Morris W. ( Author ) Mar-26-2012 ] By Hirsch, Morris W. ( Author ) [ 2012 ) [ Paperback ] Student's Solutions Manual for Fundamentals of Differential Equations 8e and Fundamentals of Differential Equations and

Boundary Value Problems 6e How Einstein gives Dirac, Klein-Gordon and Schrödinger: Deriving the Schrödinger, Dirac and Klein-Gordon Equations from the Einstein-Field-Equations via an Intelligent Zero

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)