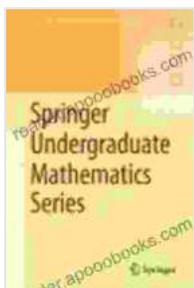


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## Understanding Markov Chains: Examples and Applications (Springer Undergraduate Mathematics Series) by Nicolas Privault

★★★★★ 5 out of 5

Language : English

File size : 7115 KB

Print length : 389 pages

Screen Reader : Supported



## **Applications in Every Corner of Science**

Witness firsthand how mathematics transcends the boundaries of academia and finds its practical applications in a myriad of scientific fields. Explore the role of calculus in optimizing rocket trajectories, the use of linear algebra in computer graphics, and the fundamental principles of cryptography that safeguard our digital world. This book bridges the gap between abstract theory and its practical significance.

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### **Key Features:**

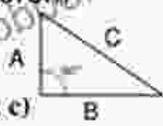
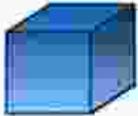
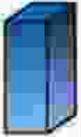
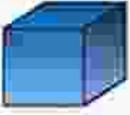
- A comprehensive collection of examples to illuminate abstract mathematical concepts

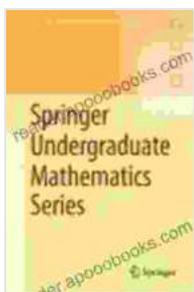
- Applications in a wide range of scientific fields, showcasing the practical significance of mathematics
- Captivating exposition that makes mathematics approachable and engaging
- An indispensable resource for undergraduate students seeking a deeper understanding
- A pedagogical masterpiece for educators seeking to inspire their students

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Join the ranks of mathematics enthusiasts and embark on an unforgettable mathematical adventure with 'Examples and Applications'. This exceptional book from the renowned Springer Undergraduate Mathematics Series is your gateway to unlocking the secrets of mathematics and discovering its boundless potential. Embrace the transformative power of mathematics and let this comprehensive guide lead you to academic success and intellectual enlightenment.

## Geometry Unit Formula Sheet

<p><b>Area of Circle</b></p> $A = \pi r^2$ $A = \pi \times \frac{d}{2} \times \frac{d}{2}$ 	<p><b>Area of Parallelograms</b></p> $A = bh$ 
<p><b>Area of Rectangle &amp; Square</b></p>  $A = lw$ 	<p><b>Area of Trapezoid</b></p> $A = \frac{(b_1 + b_2)h}{2}$ <p>(<math>b_1</math> &amp; <math>b_2</math> are the parallel lines)</p> 
<p><b>Area of Triangle</b></p> $A = \frac{bh}{2}$ 	<p><b>Circumference of Circle</b></p> $C = \pi d$ $C = 2\pi r$ 
<p><b>Perimeter</b></p> <p>Add all Sides</p>	<p><b>Pythagorean Theorem</b></p> $a^2 + b^2 = c^2$ <p>(<math>a \times a</math>) + (<math>b \times b</math>) = (<math>c \times c</math>)</p> 
<p><b>Surface Area of Cylinder</b></p> $SA = 2(\pi r^2) + (2\pi r)h$ $= 2(\pi \times r \times r) + (2\pi r)h$ 	<p><b>Surface Area of Cube</b></p> $SA = 6s^2$ $6(s \times s)$ 
<p><b>Surface Area of Rectangular Prism</b></p> $SA = 2((lw) + (lh) + (hw))$ 	<p><b>Volume of Cylinder</b></p> $V = \pi r^2 h$ $= (\pi \times r \times r) \times h$ 
<p><b>Volume of Rectangular Prism</b></p> $V = lwh$ 	<p><b>Volume of Cube</b></p> $V = S^3$ $V = S \times S \times S$ 



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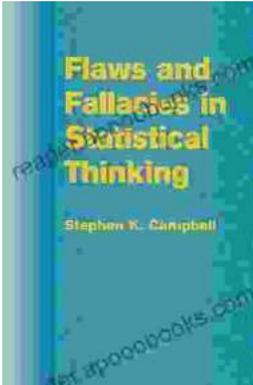
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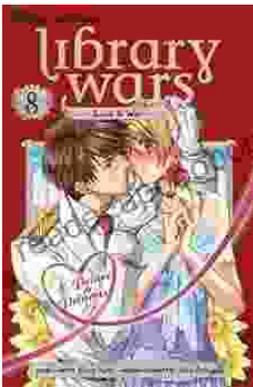
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