# Geometry of Surfaces

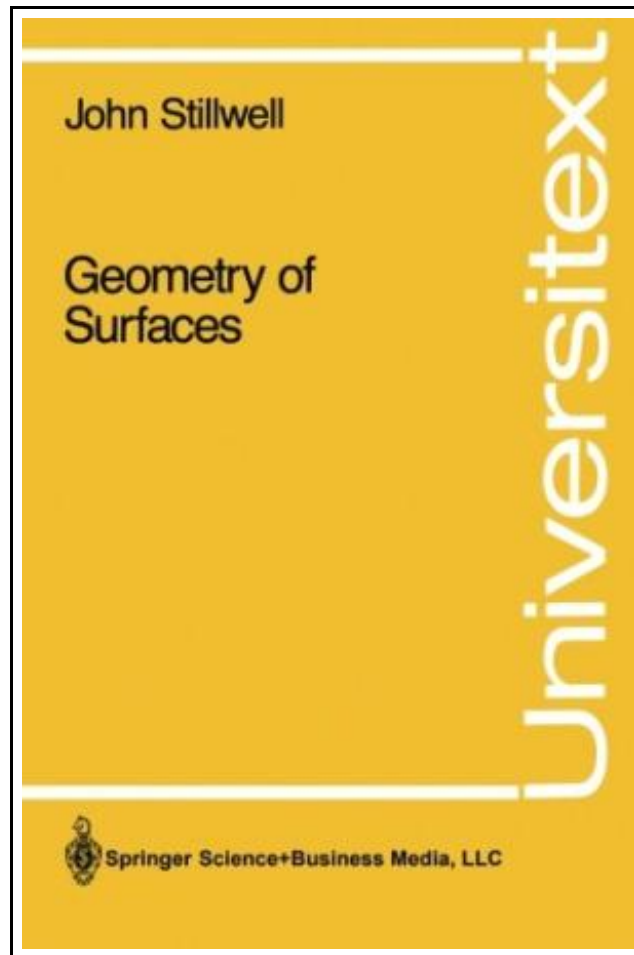John Stillwell

Geometry of Surfaces

Universitext

Springer Science+Business Media, LLC

Filesize: 3.11 MB

## Reviews

*Completely one of the better pdf I have got possibly go through. I really could comprehended every little thing using this composed e ebook. It is extremely difficult to leave it before concluding, once you begin to read the book.*
*(Torey Kreiger)*

# GEOMETRY OF SURFACES



Book Condition: New. Publisher/Verlag: Springer, Berlin | The geometry of surfaces is an ideal starting point for learning geometry, for, among other reasons, the theory of surfaces of constant curvature has maximal connectivity with the rest of mathematics. This text provides the student with the knowledge of a geometry of greater scope than the classical geometry taught today, which is no longer an adequate basis for mathematics or physics, both of which are becoming increasingly geometric. It includes exercises and informal discussions. | 1. The Euclidean Plane.- 1.1 Approaches to Euclidean Geometry.- 1.2 Isometries.- 1.3 Rotations and Reflections.- 1.4 The Three Reflections Theorem.- 1.5 Orientation-Reversing Isometries.- 1.6 Distinctive Features of Euclidean Geometry.- 1.7 Discussion.- 2. Euclidean Surfaces.- 2.1 Euclid on Manifolds.- 2.2 The Cylinder.- 2.3 The Twisted Cylinder.- 2.4 The Torus and the Klein Bottle.- 2.5 Quotient Surfaces.- 2.6 A Nondiscontinuous Group.- 2.7 Euclidean Surfaces.- 2.8 Covering a Surface by the Plane.- 2.9 The Covering Isometry Group.- 2.10 Discussion.- 3. The Sphere.- 3.1 The Sphere $S2$ in $?3$.- 3.2 Rotations.- 3.3 Stereographic Projection.- 3.4 Inversion and the Complex Coordinate on the Sphere.- 3.5 Reflections and Rotations as Complex Functions.- 3.6 The Antipodal Map and the Elliptic Plane.- 3.7 Remarks on Groups, Spheres and Projective Spaces.- 3.8 The Area of a Triangle.- 3.9 The Regular Polyhedra.- 3.10 Discussion.- 4. The Hyperbolic Plane.- 4.1 Negative Curvature and the Half-Plane.- 4.2 The Half-Plane Model and the Conformai Disc Model.- 4.3 The Three Reflections Theorem.- 4.4 Isometries as Complex Functions.- 4.5 Geometric Description of Isometries.- 4.6 Classification of Isometries.- 4.7 The Area of a Triangle.- 4.8 The Projective Disc Model.- 4.9 Hyperbolic Space.- 4.10 Discussion.- 5. Hyperbolic Surfaces.- 5.1 Hyperbolic Surfaces and the Killing-Hopf Theorem.- 5.2 The Pseudosphere.- 5.3 The Punctured Sphere.- 5.4 Dense Lines on the Punctured Sphere.- 5.5 General Construction of Hyperbolic...

Read Geometry of Surfaces Online

Download PDF Geometry of Surfaces

# Other Kindle Books

### Would It Kill You to Stop Doing That?

Book Condition: New. Publisher/Verlag: Little, Brown Book Group | A Modern Guide to Manners | A laugh-out-loud guide to modern manners by acclaimed humorist, author, and Vanity Fair columnist Henry Alford. | A few years...

**Save ePub »**

### Violet Rose and the Surprise Party

Book Condition: New. Publisher/Verlag: Nosy Crow | With activities, 3D press-out models and over 175 stickers! Plus free games and printables online! | When busy rabbit, Violet Rose, discovers that her friend Lily has a...

**Save ePub »**

### TJ new concept of the Preschool Quality Education Engineering: new happy learning young children (3-5 years old) daily learning book Intermediate (2) (Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

**Save ePub »**

### TJ new concept of the Preschool Quality Education Engineering the daily learning book of: new happy learning young children (2-4 years old) in small classes (3)(Chinese Edition)

paperback. Book Condition: New. Ship out in 2 business day, And Fast shipping, Free Tracking number will be provided after the shipment.Paperback. Pub Date :2005-09-01 Publisher: Chinese children before making Reading: All books are the...

**Save ePub »**

### Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: The Backpack (Hardback)

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 174 x 142 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It...

**Save ePub »**

### Read Write Inc. Phonics: Orange Set 4 Non-Fiction 3 Up in the Air (Paperback)

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 176 x 97 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books

[Download Book »](#)

### Read Write Inc. Phonics: Green Set 1 Non-Fiction 3 Let s Go! (Paperback)

Oxford University Press, United Kingdom, 2016. Paperback. Book Condition: New. 215 x 88 mm. Language: N/A. Brand New Book. These decodable non-fiction books provide structured practice for children learning to read. Each set of books

[Download Book »](#)

### Grandpa Spanielson's Chicken Pox Stories: Story #1: The Octopus (I Can Read Book 2)

HarperCollins, 2005. Book Condition: New. Brand New, Unread Copy in Perfect Condition. A+ Customer Service! Summary: Foreword by Raph Koster. Introduction. I. EXECUTIVE CONSIDERATIONS. 1. The Market. Do We Enter the Market? Basic Considerations. How

[Download Book »](#)

### Fox at School: Level 3 (Paperback)

Penguin Young Readers Group, United States, 1993. Paperback. Book Condition: New. James Marshall (illustrator). Reissue. 224 x 147 mm. Language: English . Brand New Book. Using their cache of already published easy-to-read books, Puffin launched

[Download Book »](#)

### Kingfisher Readers: Dinosaur World (Level 3: Reading Alone with Some Help) (Unabridged)

Pan Macmillan. Paperback. Book Condition: new. BRAND NEW, Kingfisher Readers: Dinosaur World (Level 3: Reading Alone with Some Help) (Unabridged), Claire Llewellyn, For the first time, Kingfisher brings its expertise in beautifully-designed, trusted non-fiction to

[Download Book »](#)