Great Mathematics Books of the Twentieth Century
These two pages are from a papyrus manuscript dated in early second century A.D. They contain tables of fractions with prime denominators, followed by arithmetical problems concerning conversions between silver and copper money and between wheat standards, as well as calculations of carriage charges and of interests. They are in the special collection of University of Michigan.
Books also by Lizhen Ji

*Compactifications of Symmetric Spaces*
  by Yves Guivarc’h, Lizhen Ji, and John C. Taylor, Birkhäuser, 1998

*Compactifications of Symmetric and Locally Symmetric Spaces*
  by Armand Borel and Lizhen Ji, Birkhäuser, 2005

*Lie Groups and Automorphic Forms*
  by Lizhen Ji, Jian-Shu Li, H.W. Xu, and Shing-Tung Yau (Ed.), AMS & IP, 2006

*Proceedings of The 4th International Congress of Chinese Mathematicians*
  by Lizhen Ji, Keleng Liu, Lo Yang, and Shing-Tung Yau (Ed.), HEP & IP, 2007

*Arithmetic Groups and Their Generalizations: what, why, how?*
  by Lizhen Ji, AMS & IP, 2008

*Geometry, Analysis and Topology of Discrete Groups*
  by Lizhen Ji, Kefeng Liu, Lo Yang, and Shing-Tung Yau (Ed.), HEP & IP, 2008

*Handbook of Geometric Analysis Vol. I*
  by Lizhen Ji, Peter Li, Richard Schoen, and Leon Simon (Ed.), HEP & IP, 2008

*Automorphic Forms and the Langlands Program*
  by Lizhen Ji, Kefeng Liu, and Shing-Tung Yau (Ed.), HEP & IP, 2009

*Cohomology of Groups and Algebraic K-theory*
  by Lizhen Ji, Kefeng Liu, and Shing-Tung Yau (Ed.), HEP & IP, 2009

*Handbook of Geometric Analysis Vol. II, III*
  by Lizhen Ji, Peter Li, Richard Schoen, and Leon Simon (Ed.), HEP & IP, 2010

*Transformation Groups and Moduli Spaces of Curves*
  by Lizhen Ji and Shing-Tung Yau (Ed.), HEP & IP, 2010

*Geometry and Analysis Vol. I, II*
  by Lizhen Ji (Ed.), HEP & IP, 2010

*Fourth International Congress of Chinese Mathematicians*
  by Lizhen Ji, Kefeng Liu, Lo Yang, and Shing-Tung Yau (Ed.), AMS & IP, 2010

*Geometry of Riemann Surfaces and Their Moduli Spaces*
  by Lizhen Ji, Scott A. Wolpert, and Shing-Tung Yau (Ed.), AMS & IP, 2010

*Frontiers of Mathematical Sciences*
  by Huai-Dong Cao, Shiu-Yuen Cheng, Binglin Gu, Lizhen Ji, and Shing-Tung Yau (Ed.), IP, 2011

*Fifth International Congress of Chinese Mathematicians*
  by Lizhen Ji, Yat Sun Poon, Lo Yang, and Shing-Tung Yau (Ed.), AMS & IP, 2012

*Open Problems and Surveys of Contemporary Math*
  by Lizhen Ji, Yat Sun Poon, and Shing-Tung Yau (Ed.), HEP & IP, 2013
Great Mathematics Books of the Twentieth Century

A Personal Journey

Lizhen Ji
Department of Mathematics
University of Michigan
The reading of all good books is like a conversation with the finest men of past centuries.
—— René Descartes

There is no friend as loyal as a book.
—— Ernest Hemingway

If we encounter a man of rare intellect, we should ask him what books he reads.
—— Ralph Waldo Emerson

A room without books is like a body without a soul.
—— Marcus Tullius Cicero

A house without books is like a room without windows.
—— Horace Mann

I guess there are never enough books.
—— John Steinbeck

The odd thing about people who had many books was how they always wanted more.
—— Patricia A. McKillip

I have always imagined that Paradise will be a kind of library.
—— Jorge Luis Borges

My best friend is a person who will give me a book I have not read.
—— Abraham Lincoln

I cannot live without books.
—— Thomas Jefferson

There are two motives for reading a book: one, that you enjoy it; the other, that you can boast about it.
—— Bertrand Russell
書富如入海，百貨皆有。人之精力，不能兼收盡取，
但得春所欲求者爾。故願學者每次作一意求之。
—— 蘇軾

發奮識遍天下字，立志讀盡人間書。
—— 蘇軾

路漫漫其修遠兮，吾將上下而求索。
—— 屈原

飯可以一日不吃，覺可以一日不睡，書不可以一日不讀。
—— 毛澤東

好讀書，不求甚解；每有會意，便欣然忘食。
—— 陶淵明
This is a very impressive job for both educators and researchers in mathematics. It collects basically all the important nontechnical books written by great mathematicians. The author also gave insightful comments on these books. This is especially important for those who want to get a global view about mathematics. The author writes with humors and so the book is not dry to read. I am amazed by the author’s energy in preparing this book.

Shing-Tung Yau
Fields Medalist, Wolf Prize Winner, Harvard University

This book provides an excellent and comprehensive map for your mathematical journey. It will guide you to the right direction and path for advanced studies in almost all mathematical fields.

Lo Yang
Member of Chinese Academy of Sciences (CAS)

阿貝爾有句名言：“向大師學習！”本書正是通往大師作品的極佳引導，相信會使廣大數學工作者，無論是初始的學生還是成熟的學者，都受益匪淺。

張偉平
中國科學院院士，南開大學陳省身數學研究所
Unlike other sciences, old mathematical literature has a life of its own because it records not only the background, but also so much of the detailed technical knowledge, for the mathematics of today. This remarkable book is the first one to attempt to analyse the vast literature arising from 20th century mathematics. It lists and comments on a selection of the most influential books written during this time in all of the major fields of mathematics.

John Henry Coates
Fellow of the Royal Society, Senior Whitehead Prize Winner, Cambridge University

This book gives a survey of the influential books in mathematics, touching upon almost all fields of mathematics. This is a very impressive piece of work. It reminds me of the book: A Panorama of Pure Mathematics, written by Dieudonne, except that it is of more practical value since it tells readers where to look further.

Unlike other scientific disciplines that give introductory courses such as “General Physics”, “General Chemistry” or “Introduction to Molecular Biology”, mathematics does not offer such a course. Consequently, it is very difficult for beginning mathematics students to get an overview of mathematics, what each subject is about, and how different subjects are put together. Books like this one is of great value for filling in that gap.

Weinan E
Member of Chinese Academy of Sciences (CAS), Peking University

An unusual idea: to write a catalog of the math books you love and/or respect. Anyone’s personal list of “great” books is bound to be idiosyncratic but can also be a useful complement for students to other entry points into the world of scholarly books.

David Mumford
Fields Medalist, Shaw Prize Winner, Brown University
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