March, 2018.

The following list of references for math and statistics texts may be useful.


**High Quality Online Texts and Notes:**

Also see (www.ebyte.it/library/refs/MathOnlineTexts.html),
(http://people.math.gatech.edu/~cain/textbooks/onlinebooks.html),
(http://www.openculture.com/free-math-textbooks),
(http://www.sciencebooksonline.info/mathematics.html) and
(http://statlink.tripod.com/).

(https://faculty.math.illinois.edu/~r-ash/).


(https://faculty.math.illinois.edu/~r-ash/).


Marden, J.I. (2003), *Notes on Analysis of Variance: Old School*, course notes from
(http://istics.net/pdfs/anova.pdf).

Marden, J.I. (2006), *Notes on Statistical Learning*, course notes from
(http://istics.net/pdfs/statlearn.pdf).

Marden, J.I. (2012), *Mathematical Statistics, Old School*, course notes from
(http://istics.net/pdfs/mathstat.pdf).

Marden, J.I. (2012), *Multivariate Statistics*, course notes from
(http://istics.net/pdfs/multivariate.pdf).

(http://users.stat.umn.edu/~gary/Book.html).

Olive, D.J. (2008), *Applied Robust Statistics*, available from

Olive, D.J. (2010), *Multiple Linear and 1D Regression*, available from
(http://lagrange.math.siu.edu/Olive/regbk.htm).

Olive, D.J. (2008), *A Course in Statistical Theory*, available from

Olive, D.J. (2013), *Robust Multivariate Analysis*, available from
(http://lagrange.math.siu.edu/Olive/multbk.htm).

**Calculus review or self study books:**


Calculus, Undergrad level:

Math 221, Introduction to Linear Algebra, Undergrad level

Math 302, Introduction to Proofs, Undergrad level:

Actuarial Science, Grad Undergrad level, Math 400-404:
Math 400, Interest Theory and Financial Derivatives:

**Math 401 and 402, Life Contingencies I,II:**

**Math 403 and 404, Loss Models I,II:**

**Math 450, Advanced Calculus, Grad Undergrad level:**

**Math 352, Theory of Calculus, Grad Undergrad level:**

**Math 452, Introduction to Analysis, Grad Undergrad level:**

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**Math 471, Nonlinear Programming = Optimization Theory**


**Math 473, Reliability and Survival Analysis, Grad Undergrad level:**


Also see Chapter 16 from Olive, D.J. (2010), *Multiple Linear and 1D Regression*, available from (http://lagrange.math.siu.edu/Olive/regbk.htm).

**Math 474, Time Series Analysis, Grad Undergrad level:**


**Math 475, Numerical Analysis, Grad Undergrad level:**


**Probability, Undergrad level:**


**Math 480, Calculus Based Introduction to Probability: Grad Undergrad:**


**Math 481, Introduction to Stochastic Processes, Grad Undergrad level:**


**Calculus based Introduction to Statistics, Undergrad level:**


**Math 483, Calculus based Introduction to Statistics, Grad Undergrad:**


R.E., Myers, R.H., Myers, S.L., and Ye, K. (2002),

Intermediate Statistics Texts, Grad Undergrad with level between Math 483 and 580


Math 484, Regression, Grad Undergrad level:


Math 485, Categorical Data Analysis, Grad Undergrad level:


Math 485, Statistical Sampling Theory, Grad Undergrad level:

Mendenhall, W., Ott, L. and Scheaffer, R.L. (1971), Elementary Survey Sampling, Wadsworth, Belmont, CA.

Books with level between Math 452 and Royden Math 501:


Math 501, Real Analysis, PhD level:


Math 502, Math 549, Real and Functional Analysis, PhD level:


Math 575, Numerical Linear Algebra, MS level:


Math 580, Statistical Inference, MS Level:


Math 581, Probability and Measure, PhD level:


**Math 584 Linear Models, MS level:**


**Math 585 Multivariate Analysis, Grad Undergrad level:**


**Math 586, Statistical Learning, MS level:** (top 4 may be best)


Also see Marden, J.I. (2006), *Notes on Statistical Learning*, course notes from (http://istics.net/pdfs/statlearn.pdf), and

**Math 586, Statistical Computing, MS level:**

**Statistical Computing, Grad Undergrad level:**

**Bootstrap and Resampling, undergrad level:**

**Bootstrap and Resampling, MS level:**

**Design of Experiments, Grad Undergrad level:**


**Generalized Linear Models, Grad Undergrad level:**


**Large Sample Theory, PhD level:**


**Logistic Regression, Grad Undergrad level:**


**Regression Graphics, PhD level:**

Robust Statistics, MS level:


Important Books for Statisticians:


