August, 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/).

Carol Ash’s website (https://faculty.math.illinois.edu/~ash/) has good notes for advanced calculus, differential equations, discrete math, and linear algebra.
Robert Ash’s website (https://faculty.math.illinois.edu/~r-ash/) has some good notes and books including the three below.
(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:**


**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:**


**Math 484, Regression, Grad Undergrad level:**


Olive, D.J. (2017), *Linear Regression*, Springer, New York, NY. The Springer eBook is available on SpringerLink, Springer’s online platform, (http://dx.doi.org/10.1007/978-3-319-55252-1).

**Math 485, Categorical Data Analysis, Grad Undergrad level:**


**Math 485, Statistical Sampling Theory, Grad Undergrad level:**


**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:

Also, see chapters 5-9 of Olive, D.J. (2010), *Multiple Linear and 1D Regression*, available from (http://lagrange.math.siu.edu/Olive/regbk.htm)


Generalized Linear Models, Grad Undergrad level:

Large Sample Theory, PhD level:

Also see ch. 8 of Olive, D.J. (2008), *A Course in Statistical Theory*, available from (http://lagrange.math.siu.edu/Olive/infbook.htm),

**Logistic Regression, Grad Undergrad level:**

**Regression Graphics, PhD level:**

**Robust Statistics, MS level:**

**Important Books for Statisticians:**