

Math Supplement for License Study

The following Web links are a compilation of on-line resources organized by topic. Students can use these materials in any order and at any time to review math concepts needed for exam preparation.

Many of the tutorials are part of the “Interactive Mathematics” Web site (<http://www.intmath.com>) - a free, on-line system of tutorials. The system begins with basic number concepts and progresses all the way through introductory calculus. The lessons referenced here are those of most use to a student of radio electronics.

Basic Numbers & Formulas

Order of Operations - http://www.intmath.com/Numbers/3_Order-of-operations.php

Powers, Roots, and Radicals - http://www.intmath.com/Numbers/4_Powers-roots-radicals.php

Scientific Notation - http://www.intmath.com/Numbers/6_Scientific-notation.php

Ratios and Proportions (including π) - http://www.intmath.com/Numbers/7_Ratio-proportion.php

Geometric Formulas - <http://www.equationsheet.com/sheets/Equations-4.html>

Tables of Conversion Factors - http://en.wikipedia.org/wiki/Conversion_of_units

Metric System

Metric System Overview - http://en.wikipedia.org/wiki/Metric_system

Metric System Tutorial - <http://www.arrl.org/FandES/tbp/radio-lab/RLH%20Unit%203%20Lesson%20233.1.doc>

Conversion of Metric & English Units

- <http://www.m-w.com/mw/table/metricsy.htm>

- http://en.wikipedia.org/wiki/Metric_yardstick

Fractions

Equivalent Fractions - http://www.intmath.com/Factoring-fractions/5_Equivalent-fractions.php

Multiplication and Division - http://www.intmath.com/Factoring-fractions/6_Multiplication-division-fractions.php

Adding and Subtracting - http://www.intmath.com/Factoring-fractions/7_Addition-subtraction-fractions.php

Equations Involving Fractions - http://www.intmath.com/Factoring-fractions/8_Equations-involving-fractions.php

Basic Algebra - <http://www.intmath.com/Basic-algebra/Basic-algebra-intro.php>

Graphs

Basic Graphs - <http://www.intmath.com/Functions-and-graphs/Functions-graphs-intro.php>

Polar Coordinates - http://www.intmath.com/Plane-analytic-geometry/7_Polar-coordinates.php

Exponents & Radicals - <http://www.intmath.com/Exponents-radicals/Exponent-radical.php>

Exponential & Logarithmic Functions - <http://www.intmath.com/Exponential-logarithmic-functions/Exponential-log-functions-intro.php>

Decibels - <http://www.arrl.org/hrlm/PowerAndDec.pdf> and <http://www.ac6v.com/db.htm>

Trigonometry

Basic Trig Functions - <http://www.intmath.com/Trigonometric-functions/Trig-functions-intro.php>

Graphs of Trig Functions - <http://www.intmath.com/Trigonometric-graphs/Trigo-graph-intro.php>

Complex Numbers - <http://www.intmath.com/Complex-numbers/imaginary-numbers-intro.php>