

Math Supplement for Amateur Radio License Exam Preparation

The following Web links are a compilation of on-line resources organized by topic.

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 , pi) - 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%20%233.1.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>

Coordinate Systems (advanced review) - <http://www4.wittenberg.edu/maxwell/csr.html>