# **Math Supplement**

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 (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 - www.intmath.com/Numbers/3\_Order-of-operations.php Powers, Roots, and Radicals - www.intmath.com/Numbers/4\_Powers-roots-radicals.php Scientific Notation - www.intmath.com/Numbers/6\_Scientific-notation.php Ratios and Proportions (including  $\pi$ , pi) - www.intmath.com/Numbers/7\_Ratio-proportion.php Geometric Formulas - www.equationsheet.com/sheets/Equations-4.html Tables of Conversion Factors - en.wikipedia.org/wiki/Conversion\_of\_units

## **Metric System**

Metric System Overview - en.wikipedia.org/wiki/Metric\_system

Metric System Tutorial - www.arrl.org/files/file/Radio%20Lab%20Handbook/Lesson%203/RLH%20Unit%203.pdf

Conversion of Metric & English Units

- www.m-w.com/mw/table/metricsy.htm
- en.wikipedia.org/wiki/Metric\_yardstick

#### **Fractions**

Equivalent Fractions - www.intmath.com/Factoring-fractions/5\_Equivalent-fractions.php Multiplication and Division - www.intmath.com/Factoring-fractions/6\_Multiplication-division-fractions.php Adding and Subtracting - www.intmath.com/Factoring-fractions/7\_Addition-subtraction-fractions.php Equations Involving Fractions - www.intmath.com/Factoring-fractions/8\_Equations-involving-fractions.php

## Algebra & Trigonometry

Basic Algebra - www.intmath.com/Basic-algebra/Basic-algebra-intro.php
Exponents & Radicals - www.intmath.com/Exponents-radicals/Exponent-radical.php
Basic Trig Functions - www.intmath.com/Trigonometric-functions/Trig-functions-intro.php
Graphs of Trig Functions - www.intmath.com/Trigonometric-graphs/Trigo-graph-intro.php

#### Graphs

Basic Graphs - www.intmath.com/Functions-and-graphs/Functions-graphs-intro.php Polar Coordinates - www.intmath.com/Plane-analytic-geometry/7\_Polar-coordinates.php

#### **Advanced Math**

 $\label{log-exponential-log-e$ 

 $Complex\ Numbers\ -\ www.intmath.com/Complex-numbers/imaginary-numbers-intro.php\ Vectors\ -\ www.intmath.com/vectors/vectors-intro.php$ 

#### Decibels -

 $www.arrl.org/files/file/Product\%2520Notes/Guide\%2520to\%2520Antenna\%2520Tuners/APPENDIX\%2520A.pdf and \\www.ac6v.com/db.htm$