

# Female Math Course Syllabus

WEEK #	TOPIC	DESCRIPTION	CLASS
	<b>Orientation and Pre-Course Testing</b>	Tests of Adult Basic Education (TABE) 9A & Female Math Pre-Course Skills Assessment	
1	<b>Introduction to Spatial Reasoning</b>	• symmetry and transformations	10/06/15*
	<b>Digits and Numbers</b>	• introduction to the Real Number System	
	<b>The Number Line</b>	• introduction to concepts and notation • graphing (equalities and inequalities)	10/07/15*
	<b>Place Value</b> ↓	• writing Real Numbers (using standard, expanded, exponential notations) • evaluating (comparing and ordering) Real Numbers • rounding Real Numbers • identifying significant digits in Real Numbers • converting decimals to fractions • multiplying and dividing by power-of-ten numbers (whole number & decimal)	10/08/15*
2	<b>Operations with Rational Numbers</b> ↓ (Whole Numbers & Decimals, Integers)	• operations with signed numbers • exponents, scientific notation, logarithms • order of operations (PEMDAS) • number series and sequences	10/13/15*
	<b>Fractions and Mixed Numbers</b>	• introductory exercises • adding, subtraction, multiplying, and dividing • converting fractions to decimals	10/14/15*
	<b>Using a Calculator</b> <b>Percents</b> ↓	• converting decimals to percents and <i>vice versa</i> • basic and complex problems	10/15/15‡
	<b>Ratios and Proportions</b> ↓	• maps, medications, unit pricing, gears & pulleys	
3	<b>Set Theory</b>	• describing sets; set notation; Venn diagrams; application of sets	10/20/15*
	<b>Counting Methods</b> <b>Probability and Statistics</b>	• factorials, permutations, and combinations • outcomes; measures of central tendency and dispersion	10/21/15‡
4	<b>Data Analysis and Measurement</b>	• tables and charts (creating & interpreting) • "reading"/using a ruler & architect's scale	10/22/15‡ 10/27/15*
	<b>Dimensional Analysis</b>	• conversions: English - English; metric - metric • conversions: English - metric & metric - English	10/28/15* 10/29/15*
5	<b>Euclidean Geometry</b> ↓	• points, lines, angles, planes, and solids; using a protractor & compass • formulae (perimeter, circumference, area, volume, etc.)	11/03/15* 11/04/15*
	<b>Cartesian Geometry</b> ↓	• coordinate points, formulae, and equations of lines	11/05/15*
6	<b>Introduction to Algebra</b> ↓	• expressions (rational and radical)	11/10/15‡
		• polynomials (including special factors and products) • equations: linear & quadratic (solving and graphing)	11/11/15‡ 11/12/15‡
7	<b>Introduction to Algebra</b> ↓	• functions: identifying [polynomial, constant, linear, quadratic, rational] & graphing	11/17/15‡
		• algebraic word problems	11/18/15‡
8	<b>Introduction to Trigonometry</b>	• algebraic word problems	11/19/15‡
		• matrices and determinants	11/24/15‡
	<b>Post-Course Testing and Graduation</b>	TABE 10A & Female Math Post-Course Skills Assessment	12/01/15‡ 12/02/15‡

↓ reducing math-anxiety exercises

\*calculators forbidden

‡calculators required & will be provided