Female Math Course Syllabus

Week #	Class #	Topic	Description
1	1*	**Introduction to Set Theory**	terms, notation, operations
		Digits and Numbers	the Real Number System
		The Number Line	introduction to concepts & notation
			graphing (absolute value, equalities & inequalities)
	2*	**Place Value**	writing numbers (using standard, expanded, and exponential notations)
			evaluating (comparing & ordering) numbers
			rounding numbers
			identifying significant digits in numbers
			multiplying & dividing by power-of-ten numbers (whole number & decimal)
	3*	**Operations with Numbers**⬇	integers, exponents, logarithms, radicals; order of operations (PEMDAS)
2	4*		fractions & mixed numbers
	5‡	**Percentages**⬇	basic & complex
	6‡	**Ratios and Proportions**	maps, medications, unit pricing, gears & pulleys
3	7‡	**Dimensional Analysis and**	conversions: English – English; metric – metric;
	8‡	**Scientific Notation**	English – metric & metric – English
	9‡	**Counting Methods**	factorials, fundamental counting principle; permutation & combinations
		Probability and Statistics	outcomes; measures of central tendency & dispersion
4	10‡	**Data Analysis**	tables & charts (creating/interpreting)
	11*	**Euclidean Geometry**	points, lines, angles, planes, & solids — ***using***: *ruler, protractor, measuring tape, compass*
	12*		formulæ (perimeter, circumference, area, volume, etc.)
5	13*	**Cartesian Geometry**	Coordinate points, formulæ, & equations of lines
	14*	**Pre-Algebra**	monomials, polynomials, special products, & factoring
	15*		rational expressions
6 & 7	(16 – 19)* (20 – 22) ‡	**Algebra**⬇	equations and inequalities (solving, graphing, systems, & applied problems)
8	22‡		relations & functions
	23‡	**Right Angle Trigonometry**⬇	ratios, identities, functions, & graphing
	24‡	**Post-Course Testing**	

**calculators forbidden*
‡calculators required
⬇*reducing math-anxiety exercises*