Female Math Course Syllabus

WEEK #	TOPIC	DESCRIPTION	CLASS
1	**Set Theory**	• introduction to concepts & notation	1*
	Digits and Numbers	• the Real Number System	
	The Number Line	• introduction to concepts & notation	
		• graphing (equalities & inequalities)	
	Place Value	• writing numbers (using standard, expanded, exponential notations)	2*
		• evaluating (comparing & ordering) numbers	
		• rounding numbers	
		• identifying significant digits in numbers	
		• multiplying & dividing by power-of-ten numbers (whole number & decimal)	
		• converting decimals to fractions	
	Operations with Numbers ↓	• natural, whole, integer, rational, & irrational	3*
		• radicals, exponents, scientific notation, & logarithms	
2		• order of operations (PEMDAS)	4*
		• fractions & mixed numbers	5*
	Percents ↓	• basic & complex problems	6*
3	**Ratios and Proportions**	• maps, medications, unit pricing, gears & pulleys	7*
	Dimensional Analysis ↓	• conversions: English - English; metric - metric; English - metric & metric - English	8‡
	Counting Methods	• factorials, permutations, & combinations	9‡
	Probability and Statistics	• outcomes; measures of central tendency & dispersion	
4	**Data Analysis and Measurement**	• tables & charts (creating/interpreting);	10‡
	Euclidean Geometry ↓	• points, lines, angles, planes, & solids using a ruler, protractor, & compass	11*
		• formulae (perimeter, circumference, area, volume, etc.)	12*
5	**Cartesian Geometry**	• coordinate points, formulae, & equations of lines	13‡
	Algebra ↓	• expressions (variable, rational & radical)	14‡
			15‡
6		• polynomials (including special factors & products)	16‡
			17‡
		• equations (solving, graphing & applied problems)	18‡
7		√ linear	19‡
		√ quadratic	20‡
		• inequalities (linear & quadratic)	21‡
8		• functions	22‡
	Trigonometry ↓	• introductory concepts	23‡
	Post-Course Testing	Daily Quizzes #24, Post-Course Skills Assessment, TABE 10A (Reading & Math)	24‡

↓reducing math-anxiety exercises

*calculators forbidden
‡calculators required; will be provided