

FEMALE MATH

Course Syllabus: Summer/Fall 2006

Topics	Description	Date
Theory*		
Symbolic Logic	Introduction to the methodology of solving problems <ul style="list-style-type: none"> • simple, compound and conditional statements • truth tables • formal & informal proofs of validity 	9/5, 9/7 No class 9/12
Numbers and digits	<ul style="list-style-type: none"> • Introduction to the Real Number System 	9/14
Place Value↓	<ul style="list-style-type: none"> • writing real numbers (using standard, expanded & exponential notations) • evaluating (comparing & ordering) real numbers • identifying significant digits within real numbers • rounding real numbers • multiples of 10 (introduction to scientific notation) 	9/14 9/19
The Number Line↓	<ul style="list-style-type: none"> • introduction to concepts and notation • graphing equalities and inequalities 	9/21
Operations with Real Numbers		
Addition Subtraction Multiplication Division	<ul style="list-style-type: none"> • simple & complex • interpreting and solving word problems/ estimation 	9/21
Fractions & Mixed Numbers↓	<ul style="list-style-type: none"> • forms (proper & improper) & mixed numbers • converting (proper to mixed numbers & <i>vice versa</i>) • operations (with same denominators) • operations (with different denominators) 	9/26, 9/28
Applications‡		
Using a Calculator	<ul style="list-style-type: none"> • converting fractions to decimals and <i>vice versa</i> 	10/3
Percents	<ul style="list-style-type: none"> • basic and complex 	10/3
Measurement & Data Analysis ↓	<ul style="list-style-type: none"> • ratios and proportions 1 (gears, unit pricing, etc.) • dimensional analysis & conversion factors: °English to English/metric to metric/English to metric • using a ruler (English & metric) • using a protractor & compass • ratios and proportions 2 (scale drawings, maps) • graphs, charts, tables, diagrams 	10/3 10/5 10/10
Geometry: Euclidean & Cartesian↓	<ul style="list-style-type: none"> • points, lines, angles, planes & solids • formulæ (perimeter, circumference, area, volume, distance, midpoint, slope, etc) 	10/10, 10/12
Trigonometry	<ul style="list-style-type: none"> • introduction to trigonometric functions 	10/17
Introduction to Algebra↓	<ul style="list-style-type: none"> • operations with signed numbers • order of operations (PEMDAS) • exponents and radicals • manipulating algebraic equations 	10/17 10/19 10/24
Review↓	<ul style="list-style-type: none"> • preparation for Final • test-taking strategies 	10/24
Final‡		10/26
*no calculators permitted		
‡calculators required		
↓reducing math-anxiety exercises		

FREE classes for women will be held on Tuesday and Thursday, from 5:00 – 9:00 p.m.
243 West 20th Street (between 7th & 8th Avenues), NYC