MULTIMEDIA MATERIALS FOR 7-12 LICENSING EXAM

The Dolciani Math Center (7th Floor Hunter East) has multi-media materials for the following topics in CST 7-12. Bring your ID card to the Learning Center and ask for the lesson by the call number below. If there is more than one number listed, there are several alternatives for the lesson. You may pick and choose which works best for you. Situational DVDs relate concepts to real-life situations. Tutorial CDs and DVDs present computations related to concepts.

TOPICS	SITUATIONAL DVDs	TUTORIAL CDs/DVDs	PLATO Available Under:
Rational Numbers: order, absolute value		I4 (Unit 15), I5 (Unit 19), M2	Rational Number Concepts and Operations
Operations on Rational Numbers		I1	Rational Number Concepts and Operations
Equations and Inequalities		A4, W1, Z7, Z8, D6, X5, Y7, S4, V3	Linear Inequalities: Solving and Graphing
Irrational Numbers/Complex numbers		A7, AT2, G-2, V9, X10	Complex Numbers
Operations on Decimals		I1, M1	Decimals: Operations
Repeating Decimals		I1, M1	Decimal Concepts: Place Value, Ordering, Rounding
Scientific Notation		M1, E1(3B)	Scientific Notation
Radicals and Rational Exponents		A5, A7, AT1, AT2, S3, S4, V8, X9	Rationals and Radicals: Exponents and Equations
Exponents: Basic		AT3, S1, X1	Exponents and Order of Operations: Introductory
Formulas		I4 (Unit 17)	Linear and Literal Equations and Formulas
Percent		X3, Y8, Y9	Percents
Ratio and proportion		X3, Y8	Rates, Ratio and Proportion
Units conversion		X3, Y8	Measurement: Metric System and Standard System
Proportionality , equations		X3, Y8	Rates, Ratio and Proportion
Proportionality and connection with linear equations and lines		X3, Y8	Rates, Ratio and Proportion
Multi step ratio and percent problem, interest, commissions, percent increase and decrease		X3, Y8	Rates, Ratio and Proportion
Slope, Similar triangles		A4, A7, C1 Less 3a, 3b, 3c, G-1, X5	Similiarity, Proofs and Construction
Linear equations and word problems		S2,V2	Linear and Literal Equations and Formulas & Verbal Problems-Introductory: Creating and Solving
Operations on polynomials		A2, A3, AT1, S1,V6, X5	Polynomials: Concepts, Operations, Equaivalence
Polynomial expression and operations		AT1, C1 Less 4a, 4b, 5a, G-2	Polynomials: Concepts, Operations, Equaivalence
Solving quadratic equation	J7	A6, V7, X7	Quadratic Equations: Solving
Rational expressions		A3, AT1, S3, V7, X7	Rational Expressions: Concepts, Operations and Solving
Create single variable equations, solve linear , quadratic and polynomial		S2, V2, X2	Linear and Literal Equations and Formulas
Create two variable equations to solve problems		G-7, S4, V4, X7	Systems of Linear Equations
Graphing		A4, C1 Less 3a, 3b, 3c, G-1, S4, V3, X5	Graphing Linear Equations
System of linear equation		A5, G-7, K5, S4, V4, X8	Systems of Linear Equations
Function, domain, range	J13, K1	C1.4a, G-1, O1, V4, W-1	Functions: Notation, Domain, Range, Properties, etc
Representation of functions, table, graph, algebraic	J13, K1	C1.4a, G-1, O1, V4, W-1	Functions: Translating, Combining, Graphing, Inverse
Function composition and inverse	J14, K1	G-2, O1, V11, W-1	Functions: Translating, Combining, Graphing, Inverse
Reflection, rotation and translations about origin		Z3	Transformational Geometry
Lines and angles, triangles, parallelograms		Z7, Z8	Lines and Angles
Trigonometric ratios	K2	AT4, G-4, W-2	Trigonometry: Advanced- Identities and Equations
Coordinate geometry 2-D, distance from origin, midpoint formula	J10	A-4, V-3, W-1, X-5, Y-7	Coordinate Geometry
Surface area, perimeter and volume of sphere, cones and cylinders		Z6, Z7	Surface Area and Nets & Volume: Rectangular Prisms, Cones, Pyramids, Cylinders and Spheres
Analyze data using dot plot, histogram , mean, median, interquartile range, standard deviation, outliers	SB19, H10	I5 (Unit 20), M2, M3	Statistics: Inference, Data Analysis, and Normal Distributions
Scatter plots, fit data to functions, regression	H8, SB3	I1, M1	Statistics: Box Plots, Dot Plots, Histograms, Scatterplots
Linear model regression, correlation coefficient of linear fit		I3 (Unit 12), M3	Statistics: Inference, Data Analysis, and Normal Distributions
Sampling and applications in surveys, experiments and observation studies	SB11, SB14, SB13, SB2, H7, H14	I4 (Unit 15)	Statistics: Introductory- Measures of Center and Spread
Independence and conditional probability	SB16		Probability: Conditional Probability
Bayes theorem applications	SB16		Probability: Conditional Probability