

## MULTI-MEDIA MATERIALS FOR MULTI-SUBJECT: SECONDARY TEACHERS ASSESSMENT

The Dolciani Math Center (7<sup>th</sup> Floor Hunter East) has multi-media materials for the following topics on the Multi-Subject: Secondary Teachers Assessment. 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. In addition, these are also materials available on computer using software called PLATO.

	TOPIC	TEXT	TUTORIAL	PLATO
		DVDs	CDs/DVDs	AVAILABLE UNDER:
<b>Number Systems, Vector and Matrix Quantities</b>	Order and Operations on rational numbers		X-1	Integer and Rational Operations
	Solving equations	J5	A1, A4, S2, V1, V2, X2	Linear Equations and Inequalities
	Solving inequalities		X-4	Linear Equations and Inequalities
	Order of operations		I4 (Unit 15), I5 (Unit 19), M2	Integer and Rational Operations
	Convert between rational numbers and decimals		Y-4	Decimals: Understanding Decimals
	Scientific notation and operations		S1, V6	Scientific Notation
	Radicals		A5, A7, AT1, AT2, S3, S4, V8, X9	Radicals
	Exponents		AT3, S1, X1	Exponents
	Complex numbers		A7, AT2, G-2, V9, X10	Complex Numbers - 2017
	Quadratic equations		X-9, X-10	Quadratic Equations
	Vector quantities	F2-4 (Part 7)	G-8, K5, P3, VC1	
	Matrix operations		G-8, K5, P1, P2, P3, P4	Matrix Operations - 2017
<b>Ratios and Proportional Relationships</b>	Ratio and rates		X-3, Y-7	Ratios and Proportions/Ratio and Proportional Relationships
	Percentages		Y-8	Percents
	Unit conversion		Y-7	Measurement - 2017
	Proportions and proportional relationships		V8, X3, Y-8	Ratio and Proportional Relationships
	Interest, percent increase/decrease		Y-8, Y-9	Percents
	Similar triangles		Z-4	Similarity - 2017
	Algebra and Functions	J14	V11	Functions
	Equivalent expressions		S-1, X-2	
<b>Algebra Functions</b>	Real-world solutions via equations/expressions/inequalities		S-2	
	Factoring quadratics, completing the square	J4	A2, A3, A6, AT1, S3, V6, X6	Factoring
	Polynomial operations		A2, A3, AT1, S1, S2, V6, V7, X5, X6	Polynomials
	Zeros of a function	J7	A6, V7, X7	Quadratic Equations
	Binomial theorem		A-10, G-9	Binomial Theorem
	Graphing equations		A4, C1 Less 3a, 3b, 3c, G-1, S4, V3, X5	Graphing
	Systems of equations		A5, G-7, K5, P1, S4, V4, X7, X8	Systems of Linear Equations
	Domain and range of functions		O-1	Functions
<b>Functions &amp; Trigonometry</b>	Function notation	J13	A93, C1 Less 4a, G-1, V4, X10	Functions
	Key features of functions		AT3, G-1, K1, V4, V10, X10	Function
	Create functions	D-6		Functions
	Function composition	J14	V11	Functions
	Inverse functions	J14, K1	G-2, O1, V11, W-1, F-I3, T9	Functions
	Modelling scenarios with functions	D-6		Functions
	Radians	K2	G-4, W-2	Trigonometry
	Trigonometric functions	K2	AT4, G-4, O4, W-2	Trigonometry
	Trigonometric identities	K4	AT5, G-5, G-6, W-2,	Trigonometry
	Transformations in the plane (rigid motion)	D-6		Translational (Motion) Geometry
<b>Geometry</b>	Proofs		Z-1, Z-2, Z-8	Logic and Proof Techniques
	Geometric constructions	D-6	Z-3	
	Similarity and scale factors	D-6	Z-4	Similarity – 2017; Ratio and Proportional Relationships

	Trigonometric ratios	D-6	Z-8	Trigonometry
	Right triangles		Z-5	Introductory Geometry: Angles, Lines and Polygons
	Circles/chords/diameter/etc.		F2-1, C6.3 a,b	
	Angle Measure	D-5	Z-2, Z-5	Introductory Geometry: Angles, Lines and Polygons
	Area and Perimeter	D-6	Z-6, Z-7	Introductory Geometry: Angles, Lines and Polygons
	Surface area	D-6	Z-6	
	Volume of cylinders, cones and spheres	D-6	Z-7	Area and Volume of Geometric Figures
<b>Data, Statistics, and Probability</b>	Interpret data for single and multiple variables	H8, SB2	I2, M1, E1(5C)	Data Plots and Scatterplots
	Slope, intercepts		A4, A7, C1 Less 3a, 3b, 3c, G-1, X5	Graphing
	Correlation coefficient	SB9	I3 (Unit 12), E1(5D), M3	Data Plots and Scatterplots/Correlation
	Correlation/causation		M-3	Correlation
	Make inferences from samples	SB11, SB14	E1(5A)	Introduction to Statistics - 2017
	Independence and conditional probability		L3, L5	Probability – Introductory Concepts - 2017/Conditional Probability - 2017
	Probability	SB16	J26, L3, L4, L5	Probability – Introductory Concepts - 2017/Conditional Probability - 2017