

**Table 1.3 Maryland - Alignment Among the Technical, Content, and Cognitive Demands Categories for the Math Assessments**

Test	Format				Context	Graphs			Diagrams			Formulas		Content								Cognitive Demands		
	MC	QC	GR	OE	C	S	RO	P	S	RO	P	M	G	PA	EA	IA	CG	PG	TR	SP	MISC	CU	PK	PS
<u>State Achievement Tests</u>																								
HSA Algebra	32	0	11	58	89	37	0	16	11	0	5	0	0	5	53	0	16	0	0	16	11	0	68	32
HSA Geometry	53	0	12	35	65	24	0	6	65	6	0	0	41	0	0	0	24	71	6	0	0	6	71	24
<u>College Admissions Tests</u>																								
ACT	100	0	0	0	22	5	2	0	13	0	0	15	0	17	22	5	15	25	8	3	5	40	53	7
SAT I	58	25	17	0	25	7	0	0	18	0	0	1	8	13	37	2	6	19	0	13	11	32	53	15
SAT II Math Level IC	100	0	0	0	18	8	0	0	26	0	0	12	0	2	30	10	12	28	4	8	6	34	58	8
SAT II Math Level IIC	100	0	0	0	12	12	2	0	2	0	0	10	0	2	14	22	12	14	18	6	12	26	54	20
<u>College Placement Tests</u>																								
ACCU-PLACER (Elementary Algebra)	100	0	0	0	25	0	0	0	13	0	0	13	0	0	88	0	0	13	0	0	0	0	100	0
Towson/ UOM Math Placement Test	100	0	0	0	0	6	0	0	13	0	0	25	0	19	13	31	13	6	19	0	0	25	75	0

Table Continues

Format

MC = multiple-choice items  
QC = quantitative comparison items  
GR = fill-in-the-grid items  
OE = open-ended items

Formulas

M = formula needs to be memorized  
G = formula is provided

Contextualization

C = contextualized items

Content Areas

PA = prealgebra  
EA = elementary algebra  
IA = intermediate algebra  
CG = coordinate geometry  
PG = plane geometry  
TR = trigonometry  
SP = statistics and probability  
MISC = miscellaneous topics

Diagrams

S = graph/diagram within item-stem  
RO = graph/diagram within response options  
P = graph/diagram needs to be produced

Cognitive Demands

CU = conceptual understanding  
PK = procedural knowledge  
PS = problem-solving