NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION

Pre-Formatted Reports: Benchmark Test Item Analysis - New Format

Data Selections

Institution(s): All School Types,All Schools
Benchmark Administration: 10/27/14, 2014-15 BA1 Yearlong HS Math I Calculator Inactive
Trend Profile: 2014-2015
Subject: Mathematics
Test Focus: Mathematics
Test Level: All Benchmark Test Levels
Test Category: District Benchmark
Grade: All Grade Levels
Enrollment: Current

Number of questions: 10
Number of test-taking students: 943

Student Responses

Question - Type	Correct		Incorrect	Most Common Mistake		Point Value	Points Achieved / Possible	P-Value/ Item Mean	Discrimination
	Rate	Value	Total Rate	Rate	Value				
1 - Multiple Choice	20%	B	80%	52%	A	1	187 / 943	0.20	0.12
2 - Multiple Choice	31%	C	69%	41%	A	1	290 / 943	0.31	0.30
3 - Multiple Choice	44%	C	56%	46%	A	1	416 / 943	0.44	0.49
4 - Multiple Choice	57%	A	43%	25%	B	1	534 / 943	0.57	0.49
5 - Multiple Choice	26%	B	74%	50%	A	1	247 / 943	0.26	0.18
6 - Multiple Choice	71%	A	29%	12%	B	1	668 / 943	0.71	0.48
7 - Multiple Choice	24%	D	76%	28%	C	1	225 / 943	0.24	0.33
8 - Multiple Choice	36%	C	64%	27%	B	1	338 / 943	0.36	0.43
9 - Multiple Choice	30%	A	70%	30%	C	1	281 / 943	0.30	0.39
10 - Multiple Choice	72%	B	28%	10%	A	1	676 / 943	0.72	0.42
Summary	41%		59%				**386 / 943**		

P-value represents an item's difficulty as evaluated by dividing the total number of correct responses by the total number of students tested. P-value is calculated for true/false, multiple choice, gridded or hot spot-single response items.

Item Mean is the average score for student responses to an open response question or to a multi-part question. Item Mean is calculated for inline response, matching or hot spot-multiple selections items.

Discrimination or Item Total Score Correlation is the correlation between the question score and the overall test score and indicates the extent to which success on an item corresponds to success on the test.

Standards Alignment to NC Standards

Question	ID	Standard Description
1 - Multiple Choice	CCSS.Math.Content.HSF-BF.A.1	Write a function that describes a relationship between two quantities.
2 - Multiple Choice	CCSS.Math.Content.HSF-	Use function notation, evaluate functions for inputs in their domains, and

	IF.A.2	interpret statements that use function notation in terms of a context.
3 - Multiple Choice	**CCSS.Math.Content.HSF-BF.A.1**	Write a function that describes a relationship between two quantities.
4 - Multiple Choice	**CCSS.Math.Content.HSF-IF.A.2**	Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.
5 - Multiple Choice	**CCSS.Math.Content.HSF-BF.A.2**	Write arithmetic and geometric sequences both recursively and with an explicit formula, use them to model situations, and translate between the two forms.
6 - Multiple Choice	**CCSS.Math.Content.HSN-Q.A.1**	Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.
7 - Multiple Choice	**CCSS.Math.Content.HSS-ID.A.3**	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
8 - Multiple Choice	**CCSS.Math.Content.HSS-ID.A.3**	Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).
9 - Multiple Choice	**CCSS.Math.Content.HSS-ID.C.7**	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.
10 - Multiple Choice	**CCSS.Math.Content.HSS-ID.C.7**	Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.

This report is confidential and for informal purposes