2018-19 NC Check-In 3
Grade 8 Mathematics
State Item Statistics

	Content Standard		Item #	Depth of Knowledge	Percent Correct by Item
Functions	**8.F.2**	Compare properties of two linear functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).	8^	Skill/Concept	34.5
			11^	Skill/Concept	51.6
			13^	Skill/Concept	24.4
			17^	Skill/Concept	33.6
			21^	Skill/Concept	36.6
	8.F.5	Qualitatively analyze the functional relationship between two quantities. • Analyze a graph determining where the function is increasing or decreasing; linear or non-linear. • Sketch a graph that exhibits the qualitative features of a real-world function.	3	Skill/Concept	59.2
			6	Skill/Concept	81.9
			12^	Skill/Concept	30.4
			15^	Recall	34.6
			19^	Skill/Concept	35.7
Statistics and Probability	**8.SP.1**	Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Investigate and describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.	1	Recall	37.6
			4	Recall	70.0
			7	Recall	42.2
			22^	Recall	77.6
			24^	Recall	48.9
	8.SP.2	Model the relationship between bivariate quantitative data to: • Informally fit a straight line for a scatter plot that suggests a linear association. • Informally assess the model fit by judging the closeness of the data points to the line.	9^	Skill/Concept	56.2
			16^	Skill/Concept	25.3
			18^	Skill/Concept	23.8
			23^	Skill/Concept	34.5
			25^	Skill/Concept	50.4
	8.SP.3	Use the equation of a linear model to solve problems in the context of bivariate quantitative data, interpreting the slope and *y*-intercept.	2	Skill/Concept	25.4
			5	Recall	28.4
			10^	Skill/Concept	39.6
			14^	Skill/Concept	37.3
			20^	Skill/Concept	46.6

* Items marked with an asterisk (*) are gridded response items.

^ Students had access to a calculator when completing items marked with a ^.

Note: Results from NC Check-Ins should not be compared across interims, schools, districts, or the state. Each math Grade 8 NC Check-In assesses different content standards.