

**2018-19 NC Check-In 2
Grade 8 Mathematics
State Item Statistics**

	Content Standard		Item #	Depth of Knowledge	Percent Correct by Item
Expressions and Equations	8.EE.8	Analyze and solve a system of two linear equations in two variables in slope-intercept form. <ul style="list-style-type: none"> Understand that solutions to a system of two linear equations correspond to the points of intersection of their graphs because the point of intersection satisfies both equations simultaneously. Solve real-world and mathematical problems leading to systems of linear equations by graphing the equations. Solve simple cases by inspection. 	12^	Skill/Concept	27.3
			14^	Skill/Concept	55.7
			16^	Skill/Concept	35.4
			18^	Recall	49.9
			20^	Recall	38.2
			24^	Skill/Concept	33.4
Functions	8.F.1	Understand that a function is a rule that assigns to each input exactly one output. <ul style="list-style-type: none"> Recognize functions when graphed as the set of ordered pairs consisting of an input and exactly one corresponding output. Recognize functions given a table of values or a set of ordered pairs. 	3	Recall	21.7
			13^	Recall	36.3
			19^	Skill/Concept	50.7
			22^	Skill/Concept	63.8
			23^	Skill/Concept	59.7
			25^	Skill/Concept	46.6
	8.F.3	Identify linear functions from tables, equations, and graphs.	1	Recall	36.2
			2	Recall	52.6
			4	Recall	62.9
			5	Skill/Concept	48.9
			15^	Skill/Concept	54.1
			21^	Recall	36.1
	8.F.4	Analyze functions that model linear relationships. <ul style="list-style-type: none"> Understand that a linear relationship can be generalized by $y = mx + b$. Write an equation in slope-intercept form to model a linear relationship by determining the rate of change and the initial value, given at least two (x, y) values or a graph. Construct a graph of a linear relationship given an equation in slope-intercept form. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of the slope and y-intercept of its graph or a table of values. 	6*	Recall	29.0
			7*	Skill/Concept	43.8
			8*	Skill/Concept	30.9
9*^			Skill/Concept	20.4	
10*^			Recall	21.7	
11*^			Skill/Concept	14.6	
17^			Recall	42.5	

* 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, districts, or the state.

Each math Grade 8 NC Check-In assesses different content standards.