2006 Algebra/Data Analysis Assessment

Answer Key

HSA Item Number	Answer	Indicators Assessed
1	B	**1.2.5** The student will apply formulas and/or use matrices (arrays of numbers) to solve real-world problems.
2	G	**1.1.1** The student will recognize, describe, and/or extend patterns and functional relationships that are expressed numerically, algebraically, and/or geometrically.
3	C	**3.2.2** The student will interpret data and/or make predictions by finding and using a line of best fit and by using a given curve of best fit.
4	G	**1.2.2** The student will solve linear inequalities and describe the solutions using numbers, symbols, and/or graphs.
5	C	**3.2.3** The student will communicate the use and misuse of statistics.
6	BCR	**3.1.1** The student will design and/or conduct an investigation that uses statistical methods to analyze data and communicate results.
7	D	**3.1.2** The student will use the measures of central tendency and/or variability to make informed conclusions.
8	H	**1.1.2** The student will represent patterns and/or functional relationships in a table, as a graph, and/or by mathematical expression.
9	B	**3.2.1** The student will make informed decisions and predictions based upon the results of simulations and data from research.
10	H	**3.2.1** The student will make informed decisions and predictions based upon the results of simulations and data from research.
11	D	**1.2.4** The student will describe how the graphical model of a non-linear function represents a given problem and will estimate the solution.
12	ECR	**1.1.1** The student will recognize, describe, and/or extend patterns and functional relationships that are expressed numerically, algebraically, and/or geometrically. **1.1.2** The student will represent patterns and/or functional relationships in a table, as a graph, and/or by mathematical expression.
13	40	**1.2.1** The student will determine the equation for a line, solve linear equations, and/or describe the solutions using numbers, symbols, and/or graphs.
14	0.186	**3.1.3** The student will calculate theoretical probability or use simulations or statistical inference from data to estimate the

		probability of an event.
15	5	**1.2.3** The student will solve and describe using numbers, symbols, and/or graphs if and where two straight lines intersect.
16	BCR	**3.2.2** The student will interpret data and/or make predictions by finding and using a line of best fit and by using a given curve of best fit.
17	D	**1.2.1** The student will determine the equation for a line, solve linear equations, and/or describe the solutions using numbers, symbols, and/or graphs.
18	J	**1.1.2** The student will represent patterns and/or functional relationships in a table, as a graph, and/or by mathematical expression.
19	B	**1.1.4** The student will describe the graph of a non-linear function and discuss its appearance in terms of the basic concepts of maxima and minima, zeros (roots), rate of change, domain and range, and continuity.
20	F	**1.2.3** The student will solve and describe using numbers, symbols, and/or graphs if and where two straight lines intersect.
21	A	**1.2.1** The student will determine the equation for a line, solve linear equations, and/or describe the solutions using numbers, symbols, and/or graphs.
22	H	**1.1.4** The student will describe the graph of a non-linear function and discuss its appearance in terms of the basic concepts of maxima and minima, zeros (roots), rate of change, domain and range, and continuity.
23	C	**1.1.3** The student will apply addition, subtraction, multiplication, and/or division of algebraic expressions to mathematical and real-world problems.
24	ECR	**3.2.2** The student will interpret data and/or make predictions by finding and using a line of best fit and by using a given curve of best fit. **3.2.3** The student will communicate the use and misuse of statistics.
25	0.2	**3.1.3** The student will calculate theoretical probability or use simulations or statistical inference from data to estimate the probability of an event.
26	665	**1.2.5** The student will apply formulas and/or use matrices (arrays of numbers) to solve real-world problems.
27	10.2	**1.1.1** The student will recognize, describe, and/or extend patterns and functional relationships that are expressed numerically, algebraically, and/or geometrically.
28	BCR	**3.1.2** The student will use the measures of central tendency and/or variability to make informed conclusions.
29	A	**1.2.3** The student will solve and describe using numbers, symbols, and/or graphs if and where two straight lines intersect.

30	J	**3.1.1** The student will design and/or conduct an investigation that uses statistical methods to analyze data and communicate results.
31	C	**1.2.5** The student will apply formulas and/or use matrices (arrays of numbers) to solve real-world problems.
32	J	**3.1.2** The student will use the measures of central tendency and/or variability to make informed conclusions.
33	A	**3.1.3** The student will calculate theoretical probability or use simulations or statistical inference from data to estimate the probability of an event.
34	ECR	**1.2.1** The student will determine the equation for a line, solve linear equations, and/or describe the solutions using numbers, symbols, and/or graphs. **1.2.2** The student will solve linear inequalities and describe the solutions using numbers, symbols, and/or graphs.
35	C	**1.1.1** The student will recognize, describe, and/or extend patterns and functional relationships that are expressed numerically, algebraically, and/or geometrically.
36	H	**1.2.4** The student will describe how the graphical model of a non-linear function represents a given problem and will estimate the solution.
37	A	**1.1.3** The student will apply addition, subtraction, multiplication, and/or division of algebraic expressions to mathematical and real-world problems.

Student responses to Constructed Response items can be found in the scoring section of the mdk12.org site.

How do we test what students have learned in grades 9-12? **Other assessments**