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Mississippi Academic Assessment Program-Alternate (MAAP-A)

Test Administration Booklet (TAB)

Algebra I Released

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MS_ALGI_Task_1

Academic Content Standard: A.N-CN.2.b – Solve real-world problems involving addition and subtraction of rational numbers (e.g., whole numbers or decimals), using models when needed.

Stimulus Materials:

Numbered stimulus cards:

- Stimulus card #1: a graphic of a grocery checkout lane; the word problem "Bob went grocery shopping. He bought bread for $1.99 and eggs for $1.59. He gave the cashier $5.00. How much change did Bob receive from the cashier?"
- Stimulus card #2: the amounts "$3.58", "$8.68", "$1.42"
- Stimulus card #3: a graphic of a grocery checkout with $3.58 on the screen and a customer giving the cashier a $5.00 bill; the word problem "Bob's total bill at the store was $3.58. He gave the cashier $5.00. How much change did the cashier give Bob?"

Response Materials:

- Calculator (or paper and writing tools familiar to the student)

DO: Present and point to stimulus card #1 as you read the following SAY statement.

SAY: This task is about solving addition and subtraction problems involving decimals. "Bob went grocery shopping. He bought bread for $1.99 and eggs for $1.59. He gave the cashier $5.00. How much change did Bob receive from the cashier?"

DO: Present and point to the response materials as you read the following SAY statement.

SAY: You can use these tools to help solve the word problem.

DO: Point to stimulus card #1 as you read the following SAY statement.

SAY: Remember, Bob bought bread for $1.99 and eggs for $1.59. He gave the cashier $5.00.

DO: Present and point to stimulus card #2 as you read the following SAY statement.

SAY: How much change did Bob receive from the cashier?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "$1.42" to earn four score points.

A	**4 points**	Student responds **correctly** and independently. ***This task is complete***. Go to Task 2.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "$1.42" on stimulus card #2, then point to stimulus card #1 as you read the following SAY statement.

SAY: "Bob went grocery shopping. He bought bread for $1.99 and eggs for $1.59. He gave the cashier $5.00. How much change did Bob receive from the cashier?"

DO: Point to the response materials as you read the following SAY statement.

SAY: Remember, you can use these tools to help solve the word problem. This task is about solving addition and/or subtraction problems involving decimals.

DO: Allow the student to choose a tool to use to solve the problem. Point to stimulus card #2 as you read the following SAY statement.

SAY: How much change did Bob receive from the cashier?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "$1.42" to earn three score points.

B	**3 points**	Student responds **correctly** with the provided supports. ***This task is complete***. Go to Task 2.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "$1.42"on stimulus card #2, then remove stimulus card #1. Present and point to stimulus card #3 as you read the following SAY statement.

SAY: "Bob's total bill at the store was $3.58. He gave the cashier $5.00. How much change did the cashier give Bob?"

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "$1.42" to earn two score points.

C	**2 points**	Student responds **correctly** with increased provided supports. ***This task is complete***. Go to Task 2.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "$1.42" on stimulus card #2, then point to "$1.42" on stimulus card #2 as you read the following SAY statement.

SAY: Bob's change was one dollar and forty-two cents. How much was Bob's change?

D	**1 point**	Student responds **correctly** to step-by-step directions. ***This task is complete***. Go to Task 2.

E	**0 points**	Student did not **correctly** respond to step-by-step directions. Go to Task 2.

For Second Scorer use only:	
N/O	The test administrator moved to the next task before I observed a correct student response.

MS_ALGI_Task_2

Academic Content Standard: A.N-RN.1 – Determine the value of a quantity that is squared or cubed.

Stimulus Materials:

Numbered stimulus cards:

- Stimulus card #1: the expression "2^3"
- Stimulus card #2: the numbers "6", "8", "9"
- Stimulus card #3: the equation "$2^3 = 2 \times 2 \times 2$"

DO: Present and point to stimulus card #1 as you read the following SAY statement.

SAY: This task involves finding the cube of a number. This is two cubed or two to the power of three.

DO: Present and point to stimulus card #2.

SAY: What is the value of two cubed?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "8" to earn four score points.

A	**4 points**	Student responds **correctly** and independently. ***This task is complete***. Go to Task 3.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "8" on stimulus card #2, then point to stimulus card #1 as you read the following SAY statement.

SAY: Remember, the exponent tells you how many times to multiply the base by itself.

DO: Point to stimulus card #2.

SAY: What is the value of two cubed?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "8" to earn three score points.

B	**3 points**	Student responds **correctly** with the provided supports. ***This task is complete***. Go to Task 3.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "8" on stimulus card #2, then present stimulus card #3 as you read the following SAY statement.

SAY: Two to the power of three is two times itself three times. Two cubed is the same as two times two times two.

DO: Point to stimulus card #2.

SAY: What is the value of two cubed?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "8" to earn two score points.

C	**2 points**	Student responds **correctly** with increased provided supports. ***This task is complete***. Go to Task 3.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "8" on stimulus card #2, then point to stimulus card #3 as you read the following SAY statement.

SAY: Two to the power of three equals two times two times two. That equals eight.

DO: Present and point to stimulus card #2.

SAY: What is the value of two cubed?

D	**1 point**	Student responds **correctly** to step-by-step directions. ***This task is complete***. Go to Task 3.

E	**0 points**	Student did not **correctly** respond to step-by-step directions. Go to Task 3.

For Second Scorer use only:	
N/O	The test administrator moved to the next task before I observed a correct student response.

MS_ALGI_Task_3

Academic Content Standard: A.F-IF.3 – Using vocalization, sign language, augmentative communication, or assistive technology, describe the rule in a simple sequence given the domain and range using positive numbers less than 20.

Stimulus Materials:

Numbered stimulus cards:

- Stimulus card #1: an *x*-*y* table, first column, labeled "*x*" with the following values under *x*: "1, 2, 3, 4"; second column, labeled "*y*" with the following values under *y*: "5, 6, 7, 8"
- Stimulus card #2: the equations "$x = y + 1$", "$y = x - 4$", "$y = x + 4$"
- Stimulus card #3: the RULE "$x = y + 1$", "$x = 1$ and $y = 5$", "$x = y + 1$", "$1 = 5 + 1$", "$1 \neq 6$"

Response Materials:

- Calculator (or counting objects or paper and writing tools familiar to the student)

❖ *NOTE: Have available a blank sheet of paper for masking.*

DO: Present stimulus card #1 as you read the following SAY statement.

SAY: This task is about describing a rule shown in a table. Here is a table. The values for *x* are one, two, three, four. The values for *y* are five, six, seven, eight.

DO: Present and point to stimulus card #2.

SAY: Which equation can be used to show the relationship between *x* and *y* in the table?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "$y = x + 4$" to earn four score points.

A	**4 points**	Student responds **correctly** and independently. ***This task is complete***. Go to Task 4.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

*DO: If the student does not identify "*y = x + 4*" on stimulus card #2, then point to stimulus card #1 as you read the following SAY statement.*

SAY: When *x* is one, *y* is five. When *x* is two, *y* is six. When *x* is three, *y* is seven. When *x* is four, *y* is eight. What happens to the value of *x* to get the value of *y*?

DO: Point to each equation on stimulus card #2 as you read the following SAY statement.

SAY: The possible rules are that one is added to *y* to get *x*, four is subtracted from *x* to get *y*, or four is added to *x* to get *y*. Which equation can be used to show the relationship between *x* and *y* in the table?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "$y = x + 4$" to earn three score points.

B	**3 points**	Student responds **correctly** with the provided supports. ***This task is complete***. Go to Task 4.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

*DO: If the student does not identify "*y = x + *4" on stimulus card #2, then present and point to stimulus card #3 as you read the following SAY statement.*

SAY: The rule for a table must be true for all pairs of numbers in the table. Let's test the rule of *x* equals *y* plus one. Our first values are *x* equals one and *y* equals five. *[Point to each value.]* **We put one and five in the equation for *x* and *y*. One equals five plus one, but we know one does not equal six. That means the equation *x* equals *y* plus one is not the rule for the table.**

*DO: Point to stimulus card #2 and mask the answer choice "*x = y + *1".*

SAY: Which equation can be used to show the relationship between *x* and *y* in the table?

DO: Point to and read the remaining answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "$y = x + 4$" to earn two score points.

C	**2 points**	Student responds **correctly** with increased provided supports. ***This task is complete***. Go to Task 4.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

*DO: If the student does not identify "*y = x + *4" on stimulus card #2, then point to "*y = x + *4" on stimulus card #2 as you read the following SAY statement.*

SAY: The rule for the table is that we add four to *x* to get *y*. Which equation can be used to show the relationship between *x* and *y* in the table?

D	**1 point**	Student responds **correctly** to step-by-step directions. ***This task is complete***. Go to Task 4.

E	**0 points**	Student did not **correctly** respond to step-by-step directions. Go to Task 4.

For Second Scorer use only:	
N/O	The test administrator moved to the next task before I observed a correct student response.

MS_ALGI_Task_4

Academic Content Standard: A.F-IF.4-6 – Given graphs that represent linear functions, interpret different rates of change (e.g., Which is faster or slower?).

Stimulus Materials:

Numbered stimulus cards:

- Stimulus card #1: a graph, labeled "Filling Containers" with three linear functions A, B, C; *x*-axis labeled "Time (minutes)"; *y*-axis labeled "Volume (mL)"
- Stimulus card #2: three graphs representing containers: Container A ending at point (5, 100); Container B ending at point (5, 800); Container C ending at point (5, 300)

SAY: In this task, we will compare the rate of change in different linear functions on a graph.

DO: Present and point to stimulus card #1 as you read the following SAY statement.

SAY: Three containers are being filled with water. Here is the graph titled "Filling Containers." *[Point to the* x*-axis.]* **The *x*-axis is the time in minutes from zero to five minutes.** *[Point to the* y*-axis.]* **The *y*-axis is the volume of water in milliliters. The rate at which they are filled is represented by the three lines on the graph.** *[Point to the line for Container A.]* **This is the rate at which Container A is being filled.** *[Point to the line for Container B.]* **This is the rate at which Container B is being filled.** *[Point to the line for Container C.]* **This is the rate at which Container C is being filled.**

DO: Present and point to stimulus card #2.

SAY: Which container is being filled at the fastest rate?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "Container B" to earn four score points.

A	**4 points**	Student responds **correctly** and independently. ***This task is complete***. Say closing statement.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "Container B" on stimulus card #2, then point to stimulus card #1 as you read the following SAY statement.

SAY: The three containers start at zero, zero. *[Point to the end points for each line.]* **However, each container has different amounts of water after the same amount of time, five minutes.**

DO: Point to stimulus card #2.

SAY: Which container is being filled at the fastest rate?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "Container B" to earn three score points.

B	**3 points**	Student responds **correctly** with the provided supports. ***This task is complete***. Say closing statement.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "Container B" on stimulus card #2, then point to stimulus card #1 as you read the following SAY statement.

SAY: "Fastest rate" means which container was filling up the quickest. *[Point to each end point.]* **Container A had one hundred milliliters of water after five minutes. Container B had eight hundred milliliters of water after five minutes. Container C had three hundred milliliters of water after five minutes. The container with the fastest rate would have the most water after five minutes.**

DO: Point to stimulus card #2.

SAY: Which container is being filled at the fastest rate?

DO: Point to and read the answer choices on stimulus card #2 to the student.

EXPECT: The student identifies "Container B" to earn two score points.

C	**2 points**	Student responds **correctly** with increased provided supports. ***This task is complete***. Say closing statement.
Note: If the student responds **incorrectly**, proceed to the next set of DO and SAY statements below.		

DO: If the student does not identify "Container B" on stimulus card #2, then point to the "B" on stimulus card #1 as you read the following SAY statement.

SAY: Container B has eight hundred milliliters of water after five minutes. That is the most.

DO: Point to stimulus card #2.

SAY: Which container is being filled at the fastest rate?

D	**1 point**	Student responds **correctly** to step-by-step directions. ***This task is complete***. Say closing statement.

E	**0 points**	Student did not **correctly** respond to step-by-step directions. Say closing statement.

For Second Scorer use only:	
N/O	The test administrator moved to the next task before I observed a correct student response.

Closing Statement

SAY: We are finished with the Algebra I section.