Mathematics

Grade 6

Scoring Protocol

2017-2018

Item 1	Option:	A	B	C	Correct	Scoring (0/1)

L - Here is a number line with a point labeled B. (Point to student materials.) Is Point B between 1-2, 4-5, or 7-8?

		1-2	4-5	7-8	c	

Scoring: 0 = incorrect; 1 = correct

Item 2	Option:	A	B	C	Correct	Scoring (0/1)

M - Here is a picture graph. (Point to student materials.) This picture graph shows how students get to school. How many students ride the bus: 4, 6, or 7?

a set of 6 dots (the full cell) represents each picture on the grid

		4	6	7	c	

Scoring: 0 = incorrect; 1 = correct

Item 3	Option:	A	B	C	Correct	Scoring (0/1)

L - Here is an addition problem. (Point to student materials.) If you have $3, and your friend has $4, how much money do you both have all together: $5, $6, or $7?

numbers are substituted for pictures in the equation

		$5	$6	$7	c	

Scoring: 0 = incorrect; 1 = correct

Item 4	Option:	A	B	C	Correct	Scoring (0/1)

L - Median means in the middle. For example, a median in a road would be a wall or line in the middle. It might look like this. (Point to student materials.) Look at this number line. What number is in the middle of the 2 and the 4: 2, 3, or 4?

the picture of a road is omitted

		2	3	4	b	

Scoring: 0 = incorrect; 1 = correct

Item 5	Option:	A	B	C	Correct	Scoring (0/1)

L - Here is a 6 foot by 1 foot rectangle made of squares. (Point to student materials.) What is the area of this figure: 4, 5, or 6 square feet?

		4	5	6	c	

Scoring: 0 = incorrect; 1 = correct

Item 6	Option:	A	B	C	Correct	Scoring (0/1)

L - Here is a picture graph of students' favorite fruit. (Point to student materials.) How many students like pineapple the best: 4, 5, or 6?

a set of 6 dots (the full cell) represents each picture on the grid

		4	5	6	a	

Scoring: 0 = incorrect; 1 = correct

Item 7	Option:	A	B	C	Correct	Scoring (0/1)

M - Here is a number line with a point labeled F. (Point to student materials.) Is Point F between 12-13, 15-16, or 19-20?

		12-13	15-16	19-20	a	

Scoring: 0 = incorrect; 1 = correct

Item 8	Option:	A	B	C	Correct	Scoring (0/1)

L - Here is a description of an expression: Three plus m. (Point to student materials.) Which of these expressions matches the description: A, B, or C?

	3 + m	3m	3 - m	a	
	A	B	C		

Scoring: 0 = incorrect; 1 = correct

Item 9	Option:	A	B	C	Correct	Scoring (0/1)

numbers are substituted for pictures of money in the equation

M - Here is an addition problem. (Point to student materials.) You have $11 and your friend has $6. How much money do you have all together: $15, $16, or $17?

	$15	$16	$17	c	

Scoring: 0 = incorrect; 1 = correct

Item 10	Option:	A	B	C	Correct	Scoring (0/1)

H - Here is a description of an expression: Nine plus four times x, minus three times y. (Point to student materials.) Which of these expressions matches the description: A, B, or C?

	9 + 4x - 3y	9x + 4y	9 + 3y	a	
	A	B	C		

Scoring: 0 = incorrect; 1 = correct

Item 11	Option:	A	B	C	Correct	Scoring (0/1)

M - Here is a bar graph of the color of the pants that students in class are wearing. (Point to student materials.) How many students are wearing brown pants: 8, 13, or 16?

	8	13	16	b	

Scoring: 0 = incorrect; 1 = correct

Item 12	Option:	A	B	C	Correct	Scoring (0/1)

M - Here is an addition problem. (Point to student materials.) Kent and George go out to pizza. Kent eats 1/4 of the pizza. George eats one whole pizza! How much pizza did they eat all together: 1/2 pizza, 1 pizza, or 1 1/4 pizza?

	1/2	1	1 1/4	c	

Scoring: 0 = incorrect; 1 = correct

Item 13	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is an addition problem. (Point to student materials.) If you eat 1/2 of a sandwich and your friend eats a whole sandwich, how many total sandwiches did you both eat: 1, 1 1/2, or 2?		1	1 1/2	2	b	

Scoring: 0 = incorrect; 1 = correct

Item 14	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a bar graph. (Point to student materials.) The bar graph shows the results of a classroom survey about favorite types of music. How many students voted that their favorite music is rock music: 7, 11, or 12?		7	11	12	a	

Scoring: 0 = incorrect; 1 = correct

Item 15	Option:	A	B	C	Correct	Scoring (0/1)
L - Frank mows lawns for extra money. He can mow 2 lawns in 1 hour. (Point to student materials.) What is the ratio of lawns to hours: 2:1, 2:3, or 3:1?		2:1	2:3	3:1	a	

Scoring: 0 = incorrect; 1 = correct

Item 16	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a number line with two numbers, 56 and 64. (Point to student materials.) Is 56 the same as 64, less than 64, or more than 64?		=	<	>	b	

Scoring: 0 = incorrect; 1 = correct

Item 17	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a line graph of the daily high temperatures for one week. (Point to student materials.) What was the high temperature on Monday: 95 degrees, 96 degrees, or 98 degrees?		95 degrees	96 degrees	98 degrees	a	

Scoring: 0 = incorrect; 1 = correct

Item 18	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is an inequality, 2x plus y is greater than or equal to 10. (Point to student materials.) Which of these values for x and y is a possible solution for this inequality: x=1, y=2; x=2, y=2; or, x=3, y=5?		x = 1, y = 2	x = 2, y = 2	x = 3, y = 5	c	

Scoring: 0 = incorrect; 1 = correct

Item 19	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is a number line with a dot on the number three. (Point to student materials.) Which number is the same distance from zero as three: -2, -3, or -4?		-2	-3	-4	b	

Scoring: 0 = incorrect; 1 = correct

Item 20	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a box that is 3 inches long, 4 inches wide, and 2 inches high. (Point to student materials.) How many cubic inches is this box: 20, 22, or 24?		20	22	24	c	

inside unit lines are omitted

Scoring: 0 = incorrect; 1 = correct

Item 21	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is a picture graph. (Point to student materials.) The picture graph shows the results of a survey about students' favorite zoo animal. How many students liked the bear the most: 3, 5, or 7?		3	5	7	a	

a set of six dots (full cell) replaces each counting shape in the graph. the words "giraffe, zebra, bear" replace pictures below the x-axis

Scoring: 0 = incorrect; 1 = correct

Item 22	Option:	A	B	C	Correct	Scoring (0/1)
H - Six people went out for dinner. The bill for their meal was $72. (Point to student materials.) If they split the costs evenly, how much money does each person owe for their meal: $10, $11, or $12?		$10	$11	$12	c	

Scoring: 0 = incorrect; 1 = correct

Item 23	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a description of an expression: Five divided by b, plus three. (Point to student materials.) Which of these expressions matches the description: A, B, or C?		$5 \div b + 3$ A	$5b + 3$ B	$5 - b + 3$ C	a	

Scoring: 0 = incorrect; 1 = correct

Item 24	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a division problem. (Point to student materials.) Joyce has 5 pencils. If she breaks them all in 1/2 how many pieces will she have: 3, 5, or 10?		3	5	10	c	

Scoring: 0 = incorrect; 1 = correct

Item 25	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is a 3 foot by 3 foot square made of squares. (Point to student materials.) What is the area of this figure: 8, 9, or 10 square feet?		8	9	10	b	

Scoring: 0 = incorrect; 1 = correct

Item 26	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a pentagon that is missing coordinates for one point. (Point to student materials.) What are the coordinates for this point: (4, 4), (4, 2), or (2, 4)?		the grid is abbreviated, x&y axes offset (4, 4)	(4, 2)	(2, 4)	c	

Scoring: 0 = incorrect; 1 = correct

Item 27	Option:	A	B	C	Correct	Scoring (0/1)
H - In order to buy concert tickets, you have to be at the ticket stand between 4 and 7 pm. (Point to student materials.) Which expression matches the description for the time period that you have to be there: A, B, or C?		$4 \leq T \leq 7$ A	$T \geq 7$ B	$T \leq 4$ C	a	

Scoring: 0 = incorrect; 1 = correct

Item 28	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is an expression, 40b - 20b + 2. (Point to student materials.) Which of these expressions is the same: A, B, or C?		60b + 2 A	20b + 2 B	18b C	b	

Scoring: 0 = incorrect; 1 = correct

Item 29	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a subtraction problem. (Point to student materials.) Amy has $32. She spent $30 on a new shirt. How much money does she have left: $2, $4, or $30?		$2	$4	$30	a	

Scoring: 0 = incorrect; 1 = correct

Item 30	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a real-world math problem about recycling bottles for money. (Point to student materials.) For every bottle (b) that gets turned in at the recycling center, the store pays 5 cents (c). Which equation shows this relationship: c = 5b, b = 5c, or b= c ?		c = 5b	b = 2c	b = c	a	

Scoring: 0 = incorrect; 1 = correct

Item 31	*Option:*	*A*	*B*	*C*	*Correct*	*Scoring (0/1)*
H - Here is a line graph of the number of people in a store. (Point to student materials.) How many people were in the store at 3 pm: 2, 6, or 18?		2	6	18	b	

Scoring: 0 = incorrect; 1 = correct

Item 32	*Option:*	*A*	*B*	*C*	*Correct*	*Scoring (0/1)*
H - Here are four numbers, 6, 6, 7, and 9. To get the average, we add the numbers together and divide by the number of entries. (Point to student materials.) What is 6 + 6 + 7 + 9 divided by 4: 5, 6, or 7?		5	6	7	c	

Scoring: 0 = incorrect; 1 = correct

Item 33	*Option:*	*A*	*B*	*C*	*Correct*	*Scoring (0/1)*
H - A calculator has 16 buttons on it. (Point to student materials.) If all calculators have 16 buttons, what is the ratio of calculators to buttons: 1:16, 8:16, or 16:1?		1:16	8:16	16:1	a	

Scoring: 0 = incorrect; 1 = correct

Item 34	*Option:*	*A*	*B*	*C*	*Correct*	*Scoring (0/1)*
H - Here is an input/output table. (Point to student materials.) The values for X are 3, 4, and 5. The corresponding values for Y are 21, 28, and what: 30, 34, or 35?		30	34	35	c	

Scoring: 0 = incorrect; 1 = correct

Item 35	*Option:*	*A*	*B*	*C*	*Correct*	*Scoring (0/1)*
		equation substituted for pictures 1/3+1/3 = ----				
H - Here is an addition problem. (Point to student materials.) Jack and Jill's mom baked them a cake. Jack ate 1/3 of the cake and Jill ate 1/3 of the cake. How much of the cake did they eat: 1/3, 2/3 or 3/3?		1/3	2/3	3/3	b	

Scoring: 0 = incorrect; 1 = correct

Item 36	*Option:*	*A*	*B*	*C*	*Correct*	*Scoring (0/1)*
H - Here are seven numbers. (Point to student materials.) The mean is the average of a set of numbers. Which number is the mean: 26, 27, or 30?		26	27	30	c	

Scoring: 0 = incorrect; 1 = correct

Item 37	*Option:*	A	B	C	*Correct*	*Scoring (0/1)*
M - Here is a horse with four legs. (Point to student materials.) If all horses have four legs, what is the ratio of horses to legs: 1:4, 4:4, or 4:8?		1:4	4:4	4:8	a	

Scoring: 0 = incorrect; 1 = correct

Item 38	*Option:*	A	B	C	*Correct*	*Scoring (0/1)*
H - Here is a measurement problem. (Point to student materials.) Bob threw a baseball. How far did he throw the ball in meters: 8m, 9m, or 10m?		8 m	9 m	10 m	c	

Scoring: 0 = incorrect; 1 = correct

Item 39	*Option:*	A	B	C	*Correct*	*Scoring (0/1)*
H - Tom has two hours to get to a concert that is 60 miles away. (Point to student materials.) How far does Tom have to drive each hour: 10 miles, 30 miles, or 60 miles?		10	30	60	b	

Scoring: 0 = incorrect; 1 = correct

Item 40	*Option:*	A	B	C	*Correct*	*Scoring (0/1)*
M - Here is a 3 foot by 4 foot rectangle, and a 2 foot by 2 foot square. (Point to student materials.) What is the area of this figure: 16, 18, or 20 square feet?		16	18	20	a	

Scoring: 0 = incorrect; 1 = correct

Item 41	*Option:*	A	B	C	*Correct*	*Scoring (0/1)*
L - Here is an equation, x plus 4 equals 10. (Point to student materials.) Which of these values for x is a possible solution for this equality: x = 6, x = 7, or x = 8?		x = 6	x = 7	x = 8	a	

Scoring: 0 = incorrect; 1 = correct

Item 42	*Option:*	A	B	C	*Correct*	*Scoring (0/1)*
M - Match the inequality with its description. 2 times x is greater than y. (Point to student materials.) Which inequality matches the description: A, B, or C?	the error in answer choice B has been corrected in the braille	2x > y A	2x < y B	2x = y C	a	

Scoring: 0 = incorrect; 1 = correct

Item 43	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is a division problem. (Point to student materials.) Three friends go get ice cream. It costs $9 for all of them to get ice cream. How much did it cost for each person to get ice cream: $3, $4, or $5? *Scoring:* 0 = incorrect; 1 = correct		$3	$4	$5	a	

Item 44	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a 3 foot by 4 foot rectangle, and a 2 foot by 3 foot rectangle. (Point to student materials.) What is the area of this figure: 16, 18, or 20 square feet? *Scoring:* 0 = incorrect; 1 = correct		16	18	20	b	

Item 45	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a table of the factors of 12 and 24. (Point to student materials.) What is the largest factor that 12 and 24 have in common: 10, 12, or 14? *Scoring:* 0 = incorrect; 1 = correct		10 input/output table shown vertically in braille	12	14	b	

Item 46	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is an expression xy - z, which means x times y minus z. (Point to student materials.) If x = 5, y = 2, and z = 3, what is the value of the expression: 6, 7 or 8? *Scoring:* 0 = incorrect; 1 = correct		6	7	8	b	

Item 47	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is a table of the factors of 5 and 10. (Point to student materials.) What is the largest factor that is the same for 5 and 10: 2, 5, or 10? *Scoring:* 0 = incorrect; 1 = correct		2 input/output table shown vertically in braille	5	10	b	

Item 48	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is an expression 2x + 9y, which means 2 times x plus 9 times y. (Point to student materials.) If x = 5 and y = 2, what is the value of the expression: 28, 29, or 30? *Scoring:* 0 = incorrect; 1 = correct		28	29	30	a	