



New York State Testing Program

Mathematics Test

Grade **8**

2009 Scoring Guide Part 2

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	
2	
3	
4	

Write an equation that can be used to represent the relationship between x and y in your table.

Equation _____

QUESTION 35

STRAND 2: ALGEBRA

Complete and Correct Response:

-

x	y
1	2
2	3
3	4
4	5

OR other valid response

AND

- $y = x + 1$

OR other valid response

Score Points:

Apply 2-point holistic rubric.

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	5
2	8
3	11
4	14

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $y = 3x + 2$

This response is complete and correct.

Score Point 2

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	5
2	10
3	15
4	20

Write an equation that can be used to represent the relationship between x and y in your table.

Equation 5x

This response is only partially correct. Most aspects of the task are addressed correctly; however, an expression, rather than an equation, is provided on the answer line.

Score Point 1

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	10
2	20
3	30
4	40

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $y = 10x + 1$

This response is only partially correct. The equation provided is correct; however, only 3 of the 4 numbers in the table are correct.

Score Point 1

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	-1
2	0
3	1
4	2

Write an equation that can be used to represent the relationship between x and y in your table.

Equation _____

This response is only partially correct. A table that correctly creates a linear pattern/relationship, even without an equation, is sufficient to demonstrate a partial understanding of the task.

Score Point 1

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	
2	
3	
4	

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $y = 1(x)$

This response is incorrect. An equation, without some correct table values, is not holistically sufficient to demonstrate even a limited understanding of the task.

Score Point 0



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2009 Practice Test

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	3
2	4
3	5
4	6

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $x + 2$

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	5
2	6
3	7
4	8

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $f(x) = x + 4$

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	6
2	9
3	14
4	21

$$y = (1)^2 + 5$$
$$y = 2^2 + 5$$
$$y = 3^2 + 5$$
$$y = 4^2 + 5$$

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $y = x^2 + 5$

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	20
2	40
3	60
4	80

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $x \cdot 20 = \underline{\hspace{2cm}}$

$$20x = x \cdot 20 = y$$

35

Complete the table below to create a pattern that shows a linear relationship between x and y .

x	y
1	1
2	2
3	3
4	4

Write an equation that can be used to represent the relationship between x and y in your table.

Equation $x=y$

8th GRADE MATHEMATICS

Name: _____

PRACTICE SET ANSWER KEY

PS 1	(0-2)	1
PS 2	(0-2)	1
PS 3	(0-2)	0
PS 4	(0-2)	1
PS 5	(0-2)	2
PS 6	(0-2)	2
PS 7	(0-2)	0
PS 8	(0-2)	2
PS 9	(0-2)	1
PS 10	(0-2)	2
PS 11	(0-2)	2
PS 12	(0-2)	0
PS 13	(0-2)	1
PS 14	(0-2)	1
PS 15	(0-2)	2
PS 16	(0-2)	2
PS 17	(0-2)	1
PS 18	(0-2)	0
PS 19	(0-2)	2
PS 20	(0-2)	1
PS 21	(0-3)	2
PS 22	(0-3)	3
PS 23	(0-3)	0
PS 24	(0-3)	1
PS 25	(0-3)	2

PS 26	(0-3)	3
PS 27	(0-3)	1
PS 28	(0-3)	0
PS 29	(0-3)	1
PS 30	(0-3)	2
PS 31	(0-2)	1
PS 32	(0-2)	0
PS 33	(0-2)	2
PS 34	(0-2)	2
PS 35	(0-2)	1
PS 36	(0-2)	1
PS 37	(0-2)	2
PS 38	(0-2)	1
PS 39	(0-2)	1
PS 40	(0-2)	2
PS 41	(0-2)	1
PS 42	(0-2)	0
PS 43	(0-2)	2
PS 44	(0-2)	2
PS 45	(0-2)	1
PS 46	(0-2)	0
PS 47	(0-2)	2
PS 48	(0-2)	1
PS 49	(0-2)	2
PS 50	(0-2)	1

