

PS 89 Dr Lydia T Wright School Of Excellence

MATH GRADE 8: MAE8G 1 MATH GRADE 8

## GRADE 8 MATH WORKOUT SET III

Instructor: ALFRED KANYURU

Name: \_\_\_\_\_

Score:  / 100

Question 1

/1

The expression  $2^3 \cdot 4^2$  is equivalent to

- $2^7$
- $2^{12}$
- $8^5$
- $8^6$

Question 2

/1

What is the product of 12 and  $4.2 \times 10^6$  expressed in scientific notation?

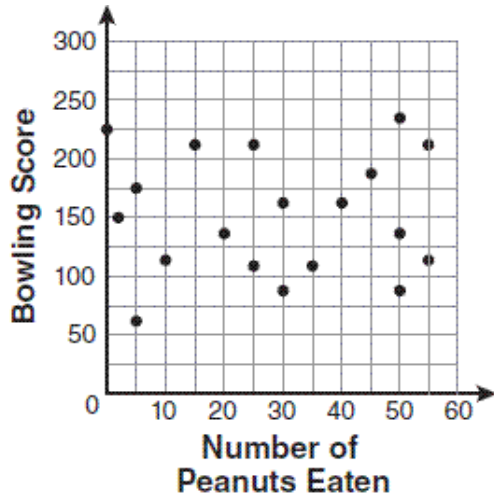
- $50.4 \times 10^6$
- $50.4 \times 10^7$
- $5.04 \times 10^6$
- $5.04 \times 10^7$

Name: \_\_\_\_\_

Question 3

/1

The scatter plot below represents the relationship between the number of peanuts a student eats and the student's bowling score.



Which conclusion about the scatter plot is valid?

- There is almost no relationship between eating peanuts and bowling score.
- Students who eat more peanuts have higher bowling scores.
- Students who eat more peanuts have lower bowling scores.
- No bowlers eat peanuts.

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Question 4

/1

Consider the two linear functions below:

**Function #1**

**The output is six less than the input**

**Function #2**

$$y = x + 2$$

What is true about the rate of change of Function 1 and Function 2?

- The rate of change of both functions is positive.
- The rate of change of both functions is negative.
- The rate of change of Function 1 is greater than the rate of change of Function 2.
- The rate of change of Function 1 is less than the rate of change of Function 2.

Question 5

/1

Which shows  $(3^2)^{-2}$  in standard form?

- 1
- 81
- 1/81
- 0

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Question 6

/1

According to the 2000 census, the population of New York State was approximately 18,900,000. How is this number expressed in scientific notation?

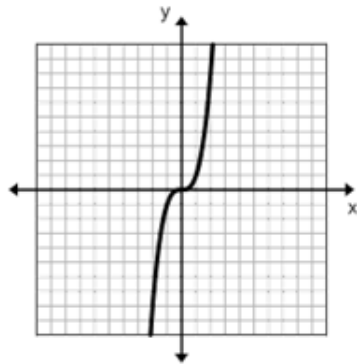
- $1890 \times 10^4$
- $18.9 \times 10^6$
- $1.89 \times 10^7$
- $189 \times 10^5$

Question 7

/1

Identify the nonlinear functions.

**Function 1**



**Function 2**

x	y
-2	4
-1	1
0	0
1	1
2	4

**Function 3**

$$y = 3x^2 + 4$$

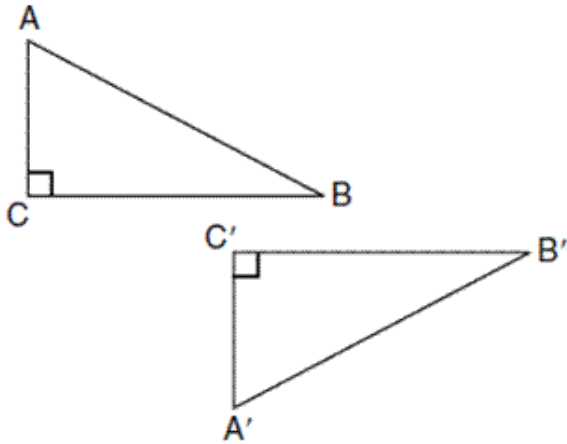
- Function 1 and Function 2
- Function 2 and Function 3
- Function 1 and Function 3
- Function 1, Function 2, and Function 3

Name: \_\_\_\_\_

Question 8

/1

In the diagram below, which transformation was used to map  $\triangle ABC$  to  $\triangle A'B'C'$ ?



dilation

rotation

reflection

slide reflection

Question 9

/1

Solve for  $x$ :  $4 - \frac{1}{2}(x + 5) = 16$

-19

-14

-29

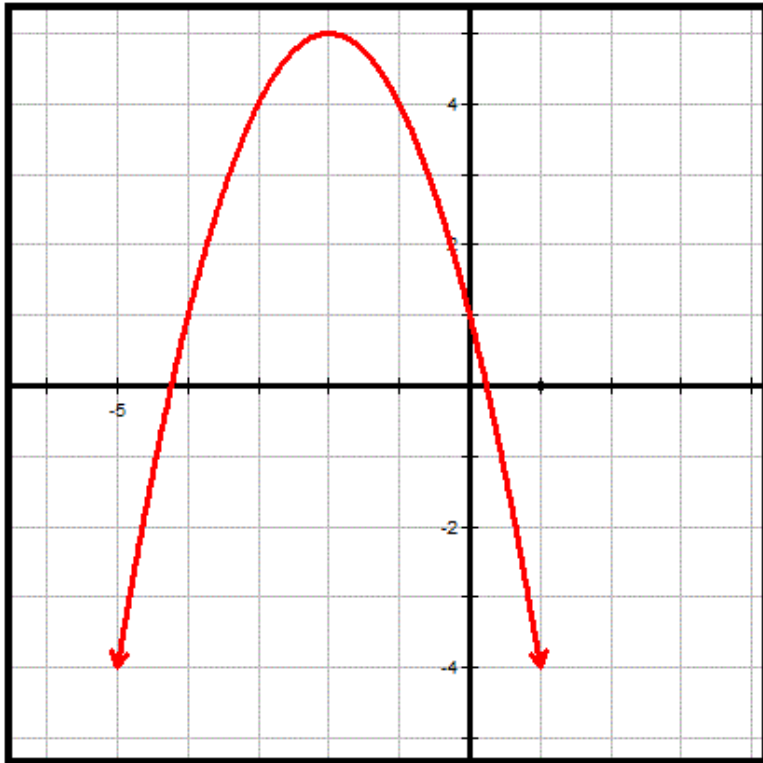
19

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Question 10

/1

Choose the correct description of the relation below:



- Linear; Function
- Nonlinear; Function
- Linear; Non-Function
- Nonlinear; Non-Function