

PS 89 Dr Lydia T Wright School Of Excellence

MATH GRADE 8: MAE8G 1 MATH GRADE 8

GRADE 8 MATH WORKOUT SET I

Instructor: ALFRED KANYURU

Name: _____

Score: / 100

Question 1

/1

A certain human red blood cell has a diameter of 0.000007 meters. Which expression represents this diameter, in meters, in scientific notation?

7×10^{-6}

7×10^{-5}

7×10^6

7×10^5

Question 2

/1

Simplify the following using the properties of integer exponents.

$$7^{-8} \times 7^5$$

7^3

7^{13}

$1/7^{40}$

$1/7^3$

Name: _____

Question 3

 /1

Which shows $(5^3)^6$ in exponential form?

- 5^9
- 5^2
- 5^3
- 5^{18}

Question 4

 /1

How else can $\frac{6^5}{6^3}$ be expressed?

- 6^2
- 6^3
- 6^4
- 6^5

Question 5

 /1

The temperature at the center of the Sun is 2.7×10^7 °F. Which is another way to write this temperature?

- 270,000 °F
- 27,000,000 °F
- 270,000,000 °F
- 2,700,000,000 °F

Name: _____

Question 6

/1

Solve for x: $9x - 4(x - 3) = 72$

- 6
- 12
- 17
- 19

Question 7

/1

Solve the system of equations below.

$$3x + 2y = 12$$
$$3x + 2y = -12$$

- $x = 8, y = 6$
- $x = 10, y = -4$
- No solution
- Infinitely many solutions

Question 8

/1

Which equation represents a nonlinear function?

- $y = -3x + 7$
- $y = x/4 - 2$
- $y = x^2$
- $y = -3x + 3$

Name: _____

Question 9

/1

Which of the following equations listed below are linear equations?

Equation I: $P = 4s$

Equation II: $V = s^3$

Equation III: $A = \pi r^2$

Equation I, only

Equation II, only

Equation II, only

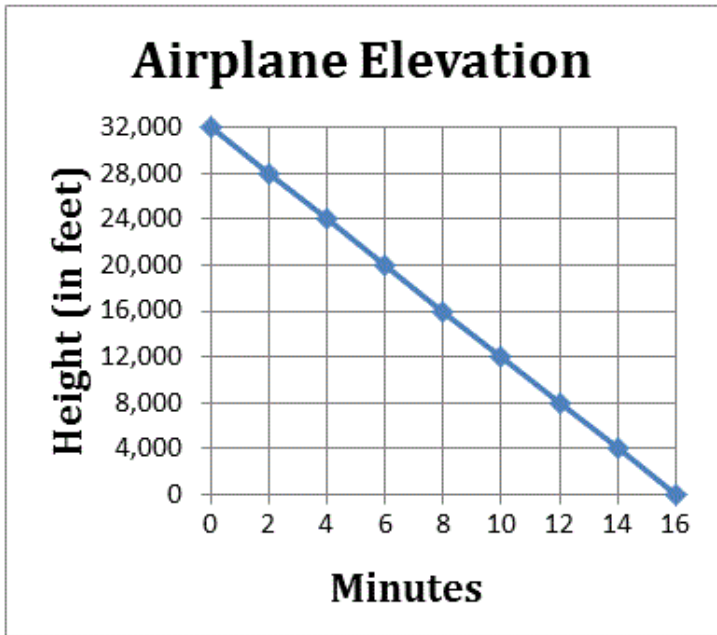
Equation II and III

Name: _____

Question 10

/1

The relationship between the height of an airplane and the time after the airplane begins its initial descent are shown in the graph below.



What is the meaning of the y-intercept?

- The change in elevation for every minute that passes.
- The change in minutes for every one foot of elevation change.
- The height of an airplane when it begins its initial descent.
- The time it took for the airplane to reach the runway.