Algebra Do Now February 07, 2020

Name.....Period.....

1.

What are the solutions to the equation $\frac{3}{4}x^2 = 48$?

2.

Elephant Population Estimates – Namibia
Combined estimates for Etosha National Park and the Northwestern Population

Year	Base Year	Estimated Number of Elephants
1998	3	3,218
2000	5	3,628
2002	7	3,721
2004	9	3,571

The elephant population in northwestern Namibia and the Etosha National Park can be predicted by the expression $2{,}649(1.045)^b$, where b is the number of years since 1995.
What does the value 2,649 represent?

A. the predicted increase in the number of elephants in the region each year

B. the predicted number of elephants in the region in 1995

C. the year when the elephant population is predicted to stop increasing

D. the percentage the elephant population is predicted to increase each year

3.

Jerome is constructing a table of values that satisfies the definition of a function.

Input	−13	20	0	−4	11	−1	17	
Output	−15	−11	−9	−2	−1	5	5	13

What number(s) can be placed in the empty cell so that the table of values satisfies the definition of a function? Select **all** that apply.

A. −5 B. −1 C. 0 D. 2 E. 11 F. 17

17. The students in a high school environmental club are trying to raise community awareness of a recycling program for old cell phones. Janine, a member of the club, created a website that members of the community can view to get more information about the program. The number of times that the website is viewed each day is recorded as a hit. On day 1, the website received 2 hits, and on day 3 the website received 8 hits.

Part A

Based on the data from days 1 and 3, Janine claims that the number of hits h on day d can be modeled by an exponential function. What is the number of hits predicted on day 6 by an exponential model? Enter your answer in the box.

Part B

Raul is also a member of the environmental club. He disagrees with Janine and claims that the number of hits each day can be modeled by a linear function.

Select from the drop-down menus to complete the sentences.

On day 2, the number of hits predicted by a linear model is Choose ... greater than less than equal to

the number of hits predicted by an exponential model.

On day 4, the number of hits predicted by a linear model is Choose ... greater than less than equal to

the number of hits predicted by an exponential model.