

NC EMPT'S
QUESTION?
of The week

A small math class has six students. The class average on a test must be greater than 80 for the class to receive a prize from the teacher. Five of the students scored the following: 66, 70, 80, 84, 95. What is the lowest grade the sixth student must score for the average to be greater than 80?

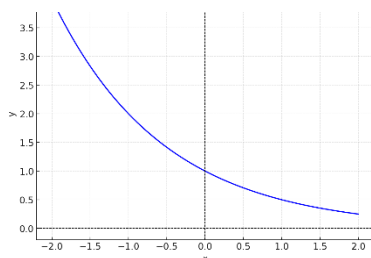
- A. 79 B. 80 C. 85 D. 86 E. 100

Last Week's Answer

What kind of function would best model the data below, where x is the independent variable and y is the dependent variable?

x	-3	-2	-1	0	1	2	3	4
y	8	4	2	1	$\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{16}$

- A. quadratic B. linear C. exponential D. rational E. absolute value



- Graphing, you would see a curve exponential in shape.
- Looking at the y -values, they are all powers of 2. To adjust for the signs of those powers, let $y = 2^{-x}$.
- Looking at a constant ratio between x and y , you will find a ratio of $\frac{1}{2}$, with an initial value of 1. You can rewrite this as $y = 1\left(\frac{1}{2}\right)^x$ or $y = \left(\frac{1}{2}\right)^x$.

Each week, we'll reveal the answer to the previous week's question!

Visit us at WWW.NCEMPT.ORG
for additional resources or to register to test for FREE!