

DO NOW

In a science fiction novel, the main character found a mysterious rock that decreased in size each day. The table below shows the part of the rock that remained at noon on successive days. Which fractional part of the rock will remain at noon on day 7?

Day	Fractional Part of the Rock Remaining
1	1
2	$\frac{1}{2}$
3	$\frac{1}{4}$
4	$\frac{1}{8}$

- 1) $\frac{1}{128}$ 3) $\frac{1}{14}$
 2) $\frac{1}{64}$ 4) $\frac{1}{12}$

What type of function is represented in the table?

$$y = 2 \cdot \left(\frac{1}{2}\right)^x$$

$$y = 2 \cdot \left(\frac{1}{2}\right)^7$$

$$y = \frac{1}{64}$$

Feb 6-12:50 PM

Homework Answers

1) \$1276.28

2) \$12072.31

3) 1503 subscribers

4a. decay

4b. growth

5) C

6) B

7a. $f(x) = 3(2)^x$

7b. 3145728 people

8a. $f(x) = 160(1 - 0.5)^x$

8b. 2.5 feet

8c. No he is not correct.
He would be
0.15625 feet away

Jan 17-6:40 AM