

Name:

ANSWERS!

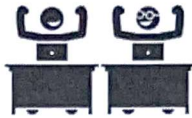
Class:



Communication



Successful Partnership



Encouragement



Solving Problem Together



Collaboration

Question 01

A social media post is getting more and more views each day. The table below shows the number of views as a function of the number of days since posting.

Days (x)	0	1	2	3
Views (y)	1,000	3,000	9,000	27,000

How would you describe each daily increase in views?

Tripled each day

Is this function linear or exponential?

↑ Exponential

Question 02

A truck rental includes an initial fee and a fee per day. The table below shows the total cost of the truck rental as a function of the number of days.

Days (x)	0	1	2	3
Cost (y)	100	140	180	220

How would you describe the daily increase in cost?

plus \$40 each day

Is this function linear or exponential?

↑ Linear

$$y = 40x + 100$$

Question 03

A lab is conducting an experiment involving the decay of a radioactive substance. The table below shows the amount remaining of a radioactive material, in grams, as a function of the number of days since the experiment began.

Days (x)	1	2	3	4
Amount (y)	10,000	5,000	2,500	1,250

How would you describe each daily decrease in the radioactive amount?

decreases by $\frac{1}{2}$ each day

Is this function linear or exponential?

↑ Exponential

How much of the radioactive substance was there at the beginning of the experiment?

Day 0 had 20,000 grams

Question 04

A vacation fund is being used by a family on vacation. The table below shows the amount of dollars remaining in the fund as a function of the number of days since the vacation began.

Days (x)	1	2	3	4
Amount (y)	1,000	800	600	400

How would you describe each daily decrease?

decreases by \$200 each day

Is this function linear or exponential?

↑ Linear

$$y = -200x + 1200$$

How much money was in the fund at the beginning of the vacation?

\$1200