

Name:

Answers!

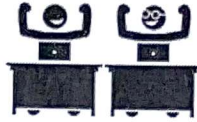
Class:



Communication



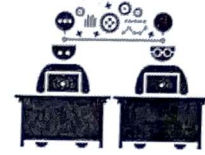
Successful Partnership



Encouragement



Solving Problem Together



Collaboration

Question 01

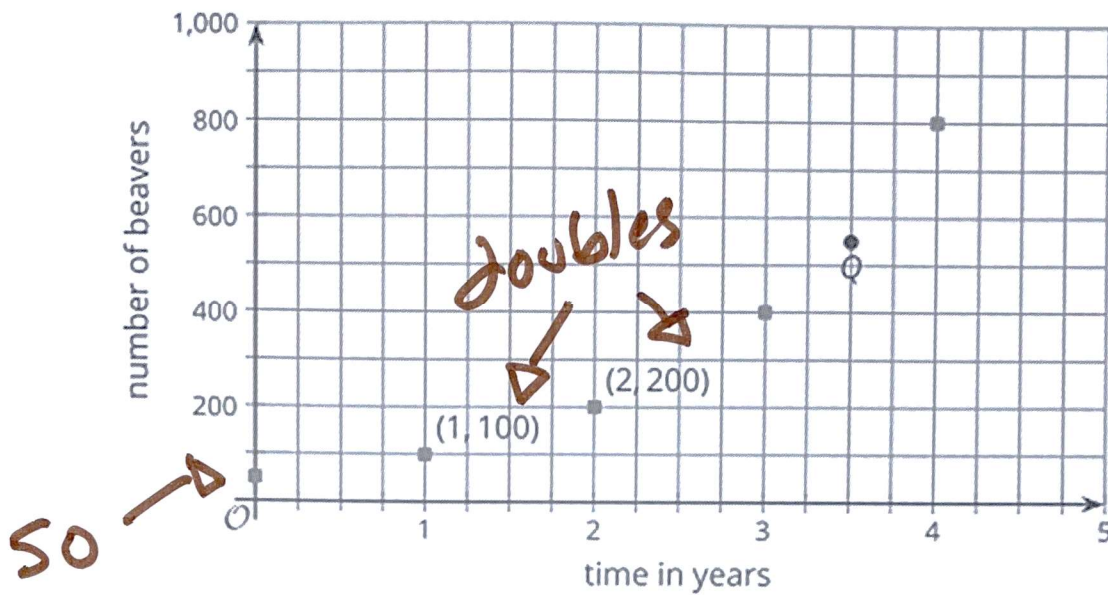
A new online music service has a collection of 1,500 songs. It expects to triple the number of songs each year for the next few years.

Write an equation representing the relationship, where  $x$  is time in years, and  $y$  is the number of songs available.

$$y = 1500(3)^x$$

Question 02

The graph shows the population of beavers in a forest for different numbers of years after 1995. The beaver population is growing exponentially.



1. Explain why we can think of the beaver population as a function of time in years.

There can only be one number of beavers each year.

2. What is the meaning of the point labeled Q in this context?

The number of beavers 3.5 years after 1995, or June 1998.

3. Write an equation using function notation to represent this situation.

$$y = 50(2)^x$$