

A colony of bacteria is grown under ideal laboratory conditions. The table below gives the number of bacteria present at the end of each hour. Formulate an exponential functional model relating the number of bacteria in the colony to the time elapsed.

Time (hours)	Number of Bacteria in Colony	Change in Colony Size	Percent Change	First Model's Colony Size	Error	Percent Error
0	1,000					
1	1,600					
2	2,800					
3	5,000					
4	8,400					
5	14,100					

First Proposed Exponential Model:

Time (hours)	Number of Bacteria in Colony	Second Model's Colony Size	Error	Percent Error
0	1,000			
1	1,600			
2	2,800			
3	5,000			
4	8,400			
5	14,100			

Second Exponential Model: