

**WS: T3-46 Linear vs. Exponential**

Decide if each context, table, or graph is linear or exponential.

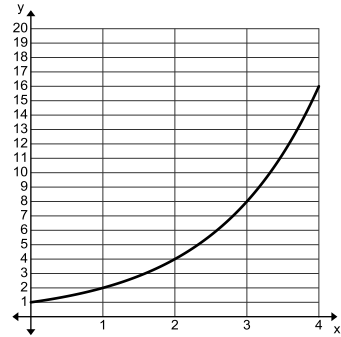
1.

You have a 20 dollars iTunes gift card. You decide to buy some songs for 1 dollar per song.

2.

x	y
0	1
1	3
2	9
3	27
4	81

3.



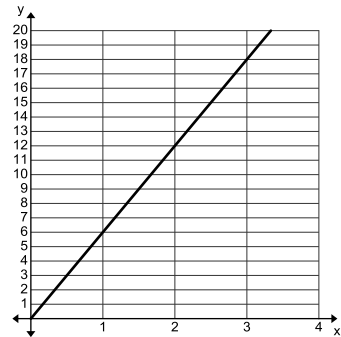
4.

x	y
0	8
1	13
2	18
3	23
4	28

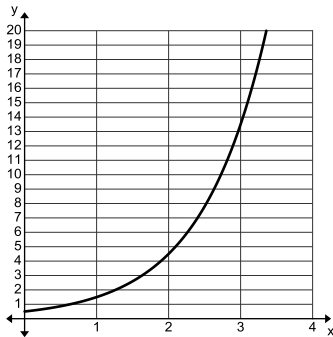
5.

You wake up with 2 chicken pox and each day the number of chicken pox you have triples.

6.



7.



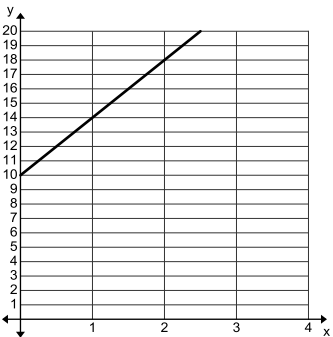
8.

You buy 3 dozen donuts and each day your family eats half of them until they are gone.

9.

x	y
0	20
1	24
2	28
3	32
4	36

10.



11.

x	y
0	4
1	20
2	100
3	500
4	2,500

12.

Your cell phone plan is 25 dollars a month plus 10 cents for each minute over your allowance.

13. The BioHealth Company is trying to eliminate the flu. In their research they have come across 2 different strands of the flu. The first strand attacks cells at a rate of 50 cells per hour. The second strand attacks cells at a rate that triples every hour. Complete the table and graph for each strand of the flu.

Strand A

Time (hours)	Cells
0	0
1	50
2	
3	
4	
5	
6	
7	
8	
9	
10	

Strand B

Time (hours)	Cells
0	1
1	3
2	
3	
4	
5	
6	
7	
8	
9	
10	

