



Objective: Exponential Function Graphs

Homework FI-3 – NYA p.470 #12 – 14 and p.480 #36 – 39, 40 – 42, 52

Do Now: Describe in your own words. 1. Origin 2. Quadrant 3. Scale

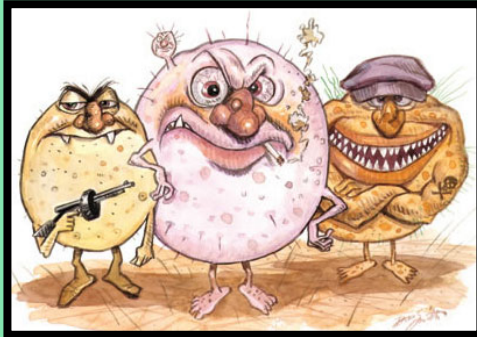
Exam Prep: Which of these occur at exponential rates?

- A) radioactive decay C) growth of bacteria
 B) compound bank interest D) all of these

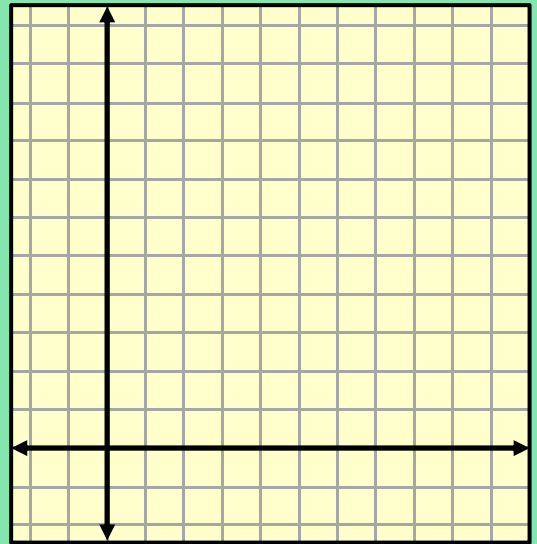
Exponential Graphs

Plot the data below onto the graph. Choose appropriate scales for x and y.

- Describe the curve.
- Compare it to linear and quadratic models.
- Will it ever be “vertical”?



x	y
0	2
1	4
2	8
3	16



Graphing Functions and Scale Practice

Assume a bacteria population doubles every hour.

Graph the data from each table, choose the right scale for y.

1. Which graph is the bacteria?

2. What function models are the others?

Table A

x	0	1	2	3	4	5	6
y	4	7	10	13	16	19	22

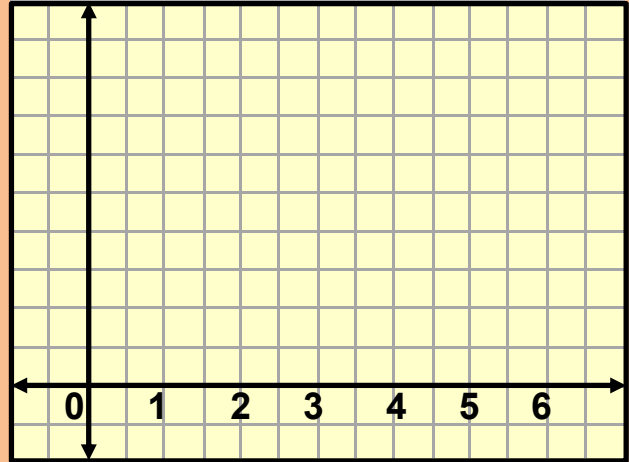


Table B

x	0	1	2	3	4	5	6
y	3	6	12	24	48	96	192

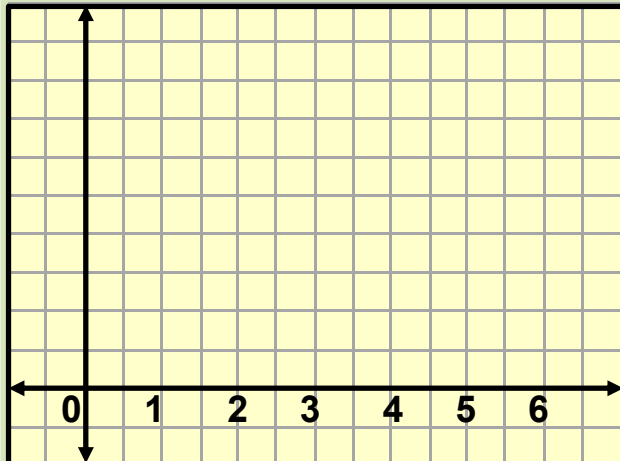
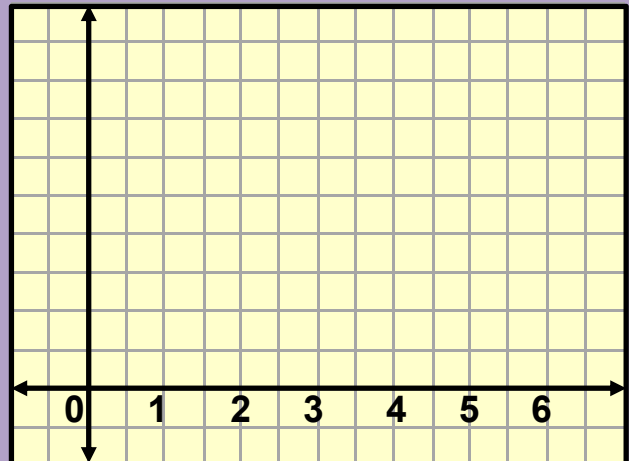


Table C

x	0	1	2	3	4	5	6
y	1	3	7	13	21	31	43



Below is a description of the graph of the population of a city over a period of time.

Match the description to the graph. Write a "story" explaining the change. For the other three graphs, describe them and write a short "story" for each.

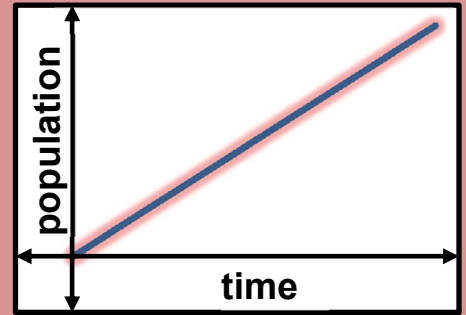
Graph ____: Population size grows at a constant rate, then doesn't change for a while, and then grows at a constant rate again. What could make this happen?

Graph ____:

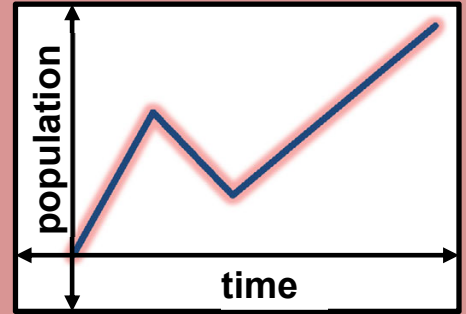
Graph ____:

Graph ____:

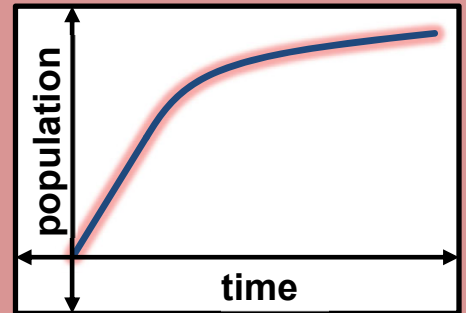
A



B



C



D

