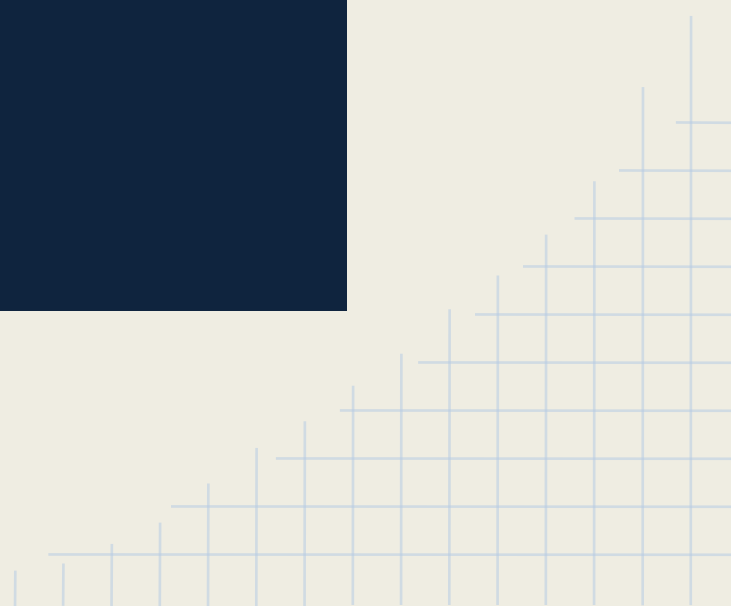




Algebra 1

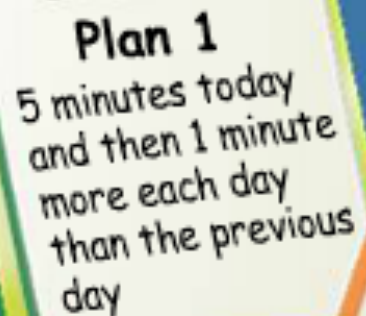
Chapter 7
Section 7-6



Growth

	<u>DAY 1</u>	<u>DAY 2</u>	<u>DAY 3</u>	<u>DAY 4</u>	<u>DAY 5</u>	<u>DAY 6</u>
Plan 1	5	6	7	8	9	10
Plan 2	1	2	4	8	16	32

Your soccer team wants to practice a drill each day. Which plan will give your team more total practice time over 4 days? Over 8 days? Explain your reasoning.



Plan 1
5 minutes today
and then 1 minute
more each day
than the previous
day



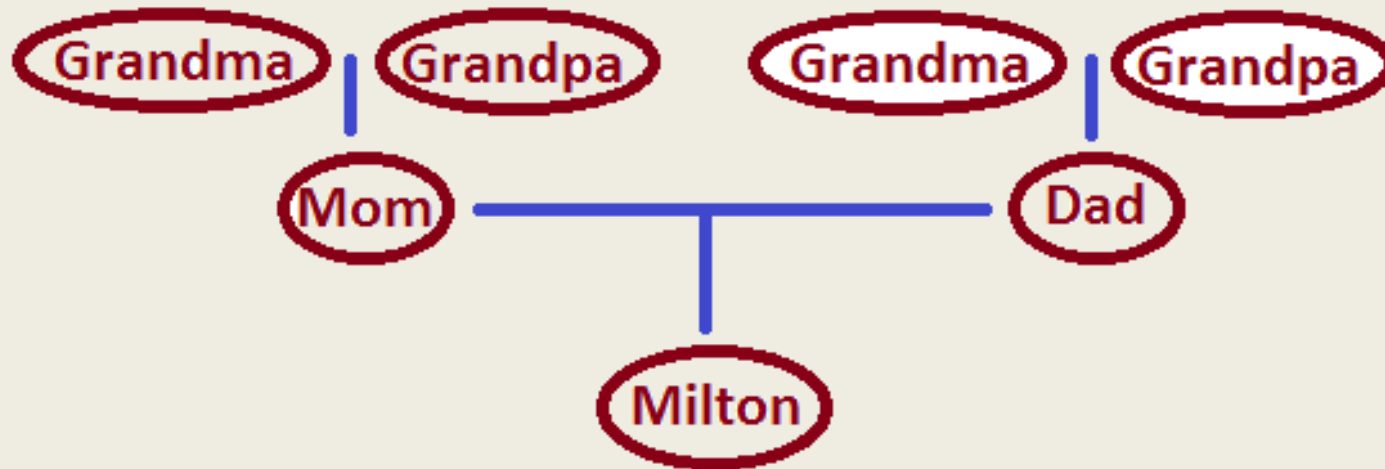
Plan 2
1 minute today
and then twice
as much time
each day as the
previous day

Family Tree

Milton is making his family tree. He comes from a long line of only children. The first three generations are drawn below.

List the number of people in each of the first 7 generations.

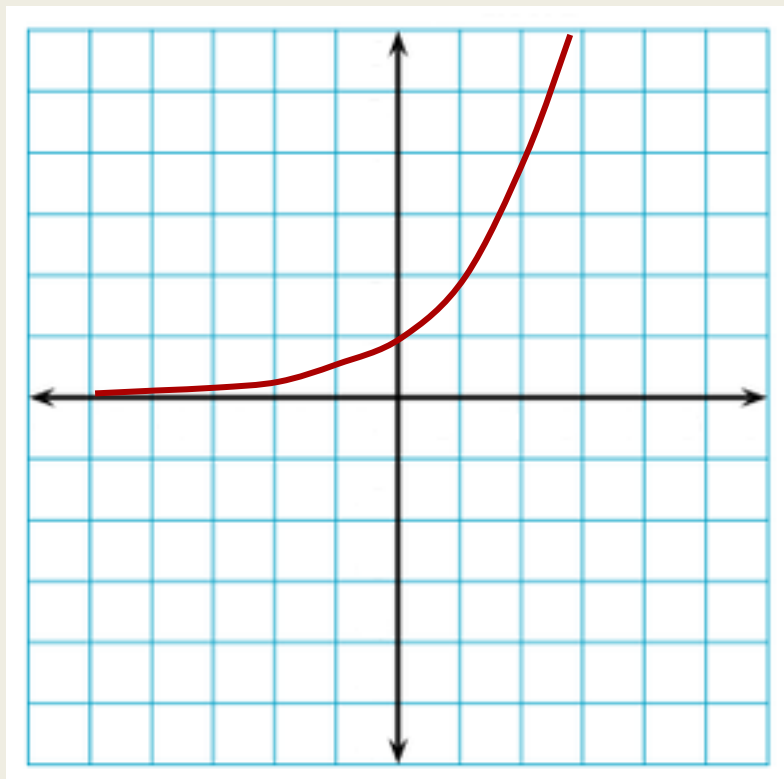
What happens to the number of people in each generation?



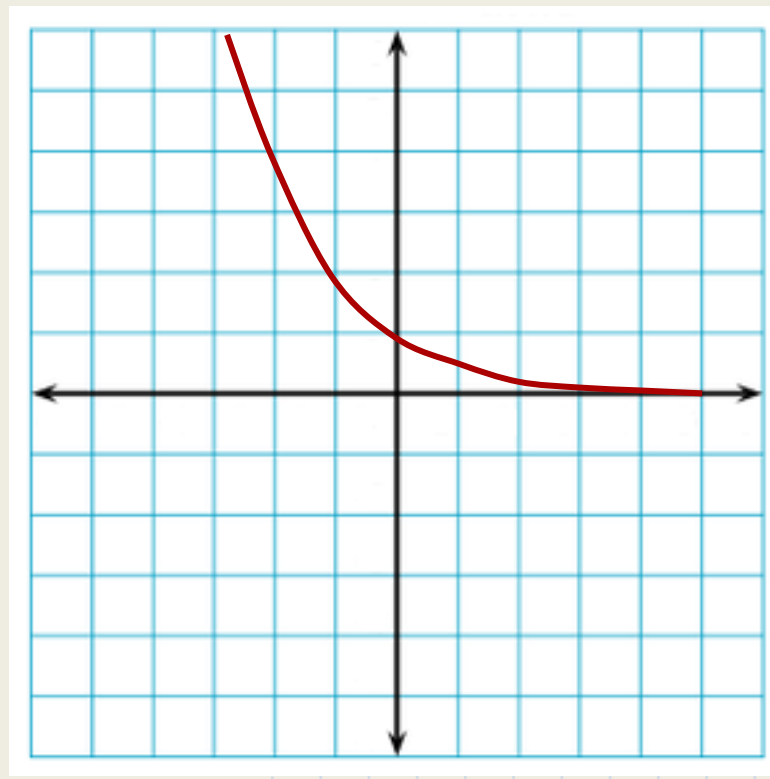
Graphing Exponential Functions

Graph the following functions:

$$f(x) = 2^x$$



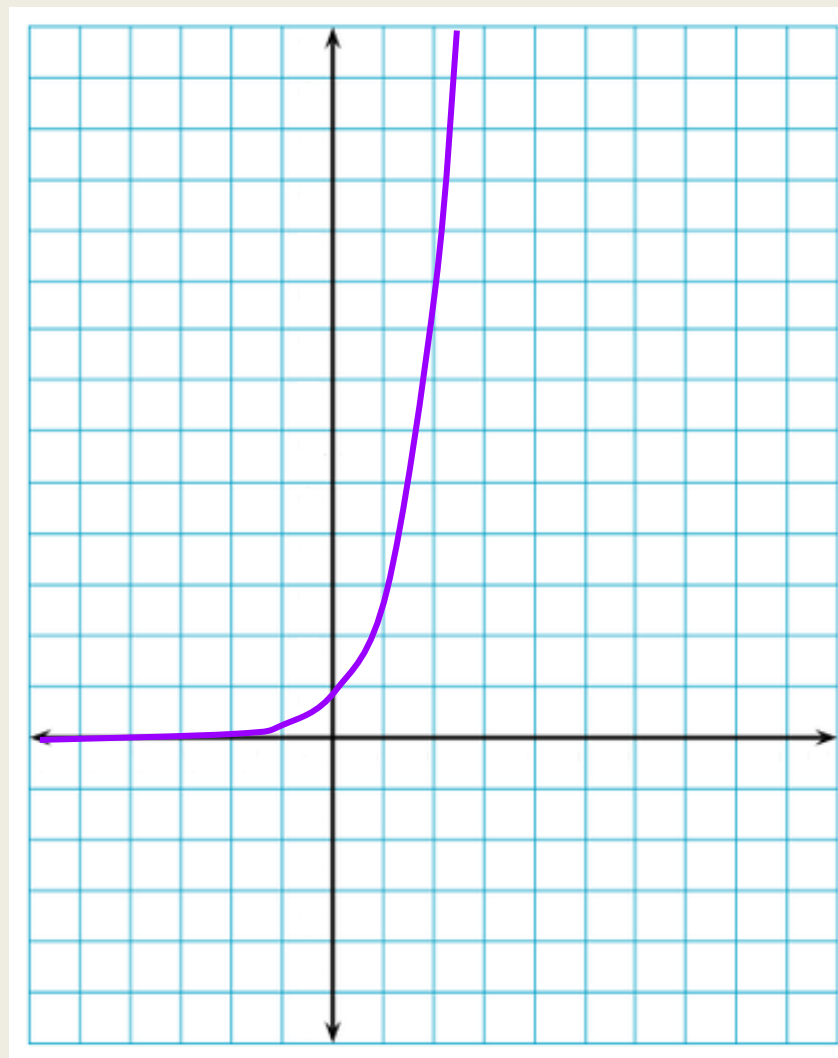
$$f(x) = \left(\frac{1}{2}\right)^x$$



Graphing

Graph the
function:

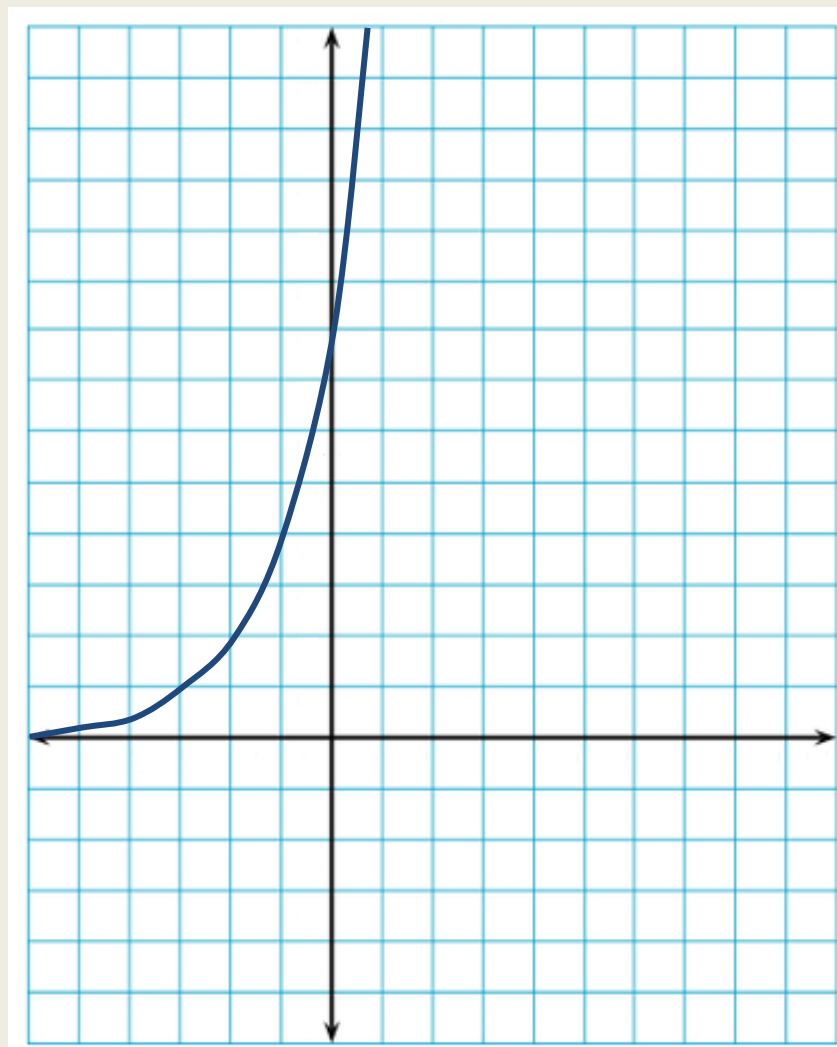
$$f(x) = 3^x$$



Graphing

Graph the
function:

$$f(x) = 8(2^x)$$



Exponential Function Equations

For the following, use function $f(x) = 4^x$.

$$f(3) =$$

$$f(-2) =$$

If the domain of the function is $\{-3, 0, 1, 2\}$ then what is the range?

Identifying a function

What is the difference between a linear and exponential function?

Are the following linear or exponential?

X	Y
1	1.5
2	3
3	6
4	12
5	24

X	Y
-2	5
-1	3
0	1
1	-1
2	-3