

multiplying by

$x=1$

$x=0$

Given the function rule, write the first 5 terms of the function.

A)  $f(x) = 5(3)^x$

x	f(x)=y
0	5
1	15
2	45
3	135
4	405

B)  $f(x) = 99\left(\frac{1}{3}\right)^{x-1}$

$f(x) = 99\left(\frac{1}{3}\right)^{x-1}$   
 mult by  $\frac{1}{3}$   
 $\div$  by 3

x	y
0	297
1	99
2	33
3	11
4	11/3

To find the next term multiply previous by 2

Given the recursive rule, find the first 5 terms of the sequence

A)  $a_n = 2a_{n-1}$   $a_0 = 5$

$a_n = 2a_{n-1}$   $a_0 = 5$

n	$a_n$
0	5
1	10
2	20
3	40
4	80

B)  $a_{n+1} = .5a_n$   $a_1 = 100$

n	$a_{n+1}$
0	200
1	100
2	50
3	25
4	12.5

$a_n = .5a_{n-1}$   
 $a_0 = 200$

$a_{n+2} = .5a_{n+1}$   
 $a_2 = 50$

next  $\leftarrow$  a sub n

previous  $\leftarrow$  a sub (n-1)

a sub 0

C)  $a_n = 10a_{n-1}$   $a_0 = 2$

n	$a_n$
0	2
1	20
2	200
3	2000
4	20000

D)  $a_{n+1} = 5a_n$   $a_1 = 10$

n	$a_{n+1}$
0	2
1	10
2	50
3	250
4	1250