

1. multiply by 2  
 2.  $f(x) = f(x-1) \cdot 2$ ;  $f(1) = 5$   
 3. start with 5, multiply by 2,  $n-1$  times  
 4.  $f(n) = 5 \cdot 2^{(n-1)}$   
 5. geometric (A)

11. multiply by 3  
 12.  $f(1) = 2$ ;  $f(n) = f(n-1) \cdot 3$   
 13. start with 2, multiply by 3,  $n-1$  times  
 14.  $f(n) = 2 \cdot 3^{(n-1)}$   
 15. geometric (C)

4th M1 1.8

6. subtract 9  
 7.  $f(1) = -8$ ;  $f(n) = f(n-1) - 9$   
 8. start with -8, subtract 9  $n-1$  times  
 • start with  $f(1)$ , subtract 9  $n$  times  
 9.  $f(n) = -8 - 9(n-1)$  (B)  

$$= -8 - 9n + 9$$

$$f(n) = -9n + 1$$
  
 10. arithmetic

16. add  $\times 12$   
 17.  $f(1) = 3$ ;  $f(n) = f(n-1) + 12$   
 18. start with 3, add 12  $n-1$  times  
 19.  $f(n) = 3 + 12(n-1)$   

$$= 3 + 12n - 12$$

$$= 12n - 9$$
  
 20. arithmetic

7th M2 1.6

$S(t) = 2$

Table		
t	hare	tortoise
0	0	1
1	1	2
2	4	4
3	9	8
4	16	16
5	25	32
6	36	64

