Algebra 1
HW27B: Tables and Sequences

Complete the table.

1. $f(x) = 2x - 3$

x	$f(x)$
7	
	-7
	23
	-3

2. $h(x) = 6x + 2$

x	$h(x)$
20	
	26
	-10
	-4

3. $n(s) = \frac{1}{2}s - 1$

s	$n(s)$
18	
	3
	11
	14

4. $m(a) = -a + 6$

a	$m(a)$
-56	
	10
	16
	3
	-14

Write the function definition.

5.

x	$f(x)$
-5	-15
-4	-12
0	0
1	3
2	6

6.

x	$g(x)$
-2	6
-1	7
0	8
1	9
2	10

7.

x	$g(x)$
-7	14
-3	6
0	0
2	-4
8	-16

8.

x	$f(x)$
-12	-48
0	0
2	8
3	12
8	32

9.

x	$f(x)$
0	-4
3	-1
4	0
6	2
24	20

10.

x	$j(x)$
-14	-7
0	0
8	4

11.

x	$m(x)$
-12	-4
-3	-1
3	1
9	3
15	5

12.

x	$l(x)$
-2	-9
-1	-8
0	-7
1	-6
2	-5

13.

k	$p(k)$
-5	-9
-2	-3
0	1
3	7
4	9

14.

x	$g(x)$
-7	3
-2	8
1	11
3	13
5	15

Identify the sequence as arithmetic, geometric, or neither.

15. $3, 6, 9, 12$ …
16. $14, 23, 34, 43$, …
17. $800, 400, 200, 100$, …

Identify the common difference and find the next three terms in the sequence.

18. $5, 10, 15, 20$, …
19. $-4, 6, 16, 26$, …
20. $0, -2, -4, -6$, …
21. $0.5, 2, 3.5, 5$, …
22. $13, 6, -1, -8$, …

Identify the common ratio and find the next three terms in the sequence.

23. $135, 45, 15, \ldots$
24. $2, 6, 18, \ldots$
25. $1, -2, 4, -8, \ldots$
26. $16000, 4000, 1000,$
27. $9, 18, 36, \ldots$

Write the function definitions for the arithmetic sequences.

28. $5, 10, 15, 20, \ldots$
29. $-4, 6, 16, 26, \ldots$
30. $0, -2, -4, -6, \ldots$
31. $0.5, 2, 3.5, 5, \ldots$
32. $13, 6, -1, -8, \ldots$

Write the function definitions for the geometric sequences.

33. $135, 45, 15, \ldots$
34. $2, 6, 18, \ldots$
35. $1, -2, 4, -8, \ldots$
36. $16000, 4000, 1000, \ldots$
37. $9, 18, 36, \ldots$