5.

1. Tell whether each sequence is arithmetic. If it is, identify the common difference.

**a.** 6, 7, 8, 9, 10,...

**d.** 1, 16, 81, 625, 1296

**b.** 5, 10, 20, 35, 55,...

 $e. -2, -4, -6, -8, -10, \dots$ 

 $\mathbf{c.}\ 0, -1, 1, -2, 2, \dots$ 

Write a recursive and an explicit rule for each of the arithmetic sequences.

۷.						
Month	n	1	2	3	4	5
Account balance (\$)	f(n)	35	32	29	26	23

Tickets	n	1	2	3	4	5
Total cost (S)	f(n)	58	65	72	79	86

4. Month Total deposits (\$) 132

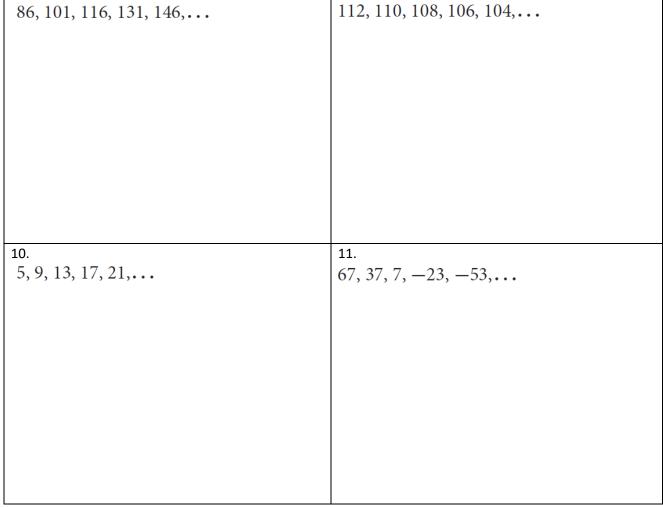
Delivery number	n	1	2	3	4	5
Weight of truck (lb)	f(n)	4567	3456	2345	1234	123

6	j.						
	Week	n	1	2	3	4	5
	Account owed (\$)	f(n)	125	100	75	50	25

7.						
Skaters	n	1	2	3	4	5
Charge for lesson (\$)	f(n)	60	80	100	120	140

Write a recursive and an explicit rule for each of the arithmetic sequences.

8.		9.
86, 10	1, 116, 131, 146,	112, 110, 108, 106, 104,



Write an explicit rule in function notation for each arithmetic sequence.

12. A student loan needs to be paid off beginning the first year after graduation. Beginning at Year 1, there is \$52,000 remaining to be paid. The graduate makes regular payments of \$8,000 each year. The graph shows the sequence.

