57 MORE Equations for Arithmetic Sequences

You're staying at a hotel downtown. It costs \$8 for a parking pass plus \$90 each night you stay.

lete a table for this situation:

	1. Complete a	table for tr	ils situation	'	Т .		10	7	8	9	-
	Nights	-1	2	3	4	5	φ		0		
- 1	Hotel Cost	98	188	278	368					·	

2. Write an explicit equation for this sequence:

3. Write a recursive equation for this sequence:

$$a_{1} = 98$$
 $a_{n} = a_{n-1} + 90$

4. How much will it cost if you stay at the hotel for four nights?

5. How much will it cost of you stay two weeks? 14

You have a job raking leaves. You earn \$12.50 in tips plus \$6.50 per hour of work.

molete a table for this situation:

6. Complete a	table for th	2	3	4	5	b	7	8	9
Total Pay	19	\$25.50	32	(I)				453t	

7. Write a recursive equation for this sequence:

$$a_1 = 19$$
 $a_n = a_{n-1} + 10.50$

8. Write an explicit equation for this sequence:

10. How much will you earn after working 30 hours?

11. How long would you have to work in order to earn \$3059 hours

Given the first term and the common difference, list the first five terms of the sequence. Then write the explicit equation for the sequence.

12.
$$f(1) = 5$$
, $d = 3.2$

13.
$$f(1) = -1$$
, $d = -7$

14.
$$f(1) = -6$$
, $d = 6$

15.
$$f(1) = 3$$
, $d = -10.5$

Ome:

7 an=a,+d(n-1)

Date:

Find the nth term for each arithmetic sequence:

1.a1 = -5,
$$d = 4$$
, $n = 9$

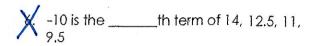
$$3.a_1 = 3$$
, $d = -4$, $n = 6$

2.
$$q_1 = 13$$
, $d = -5/2$, $n = 29$

4.
$$a_1 = -5$$
, $d = 1/2$, $n = 10$

Complete each statement:

97 is the _____th term of -3, 1, 5, 9



and the indicated term(s) in each arithmetic sequence:

7.ais for -3, 3, 9, ...

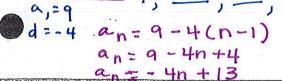
8. a₁₉ for 17, 12, 7, ...

9. The first term is -7 and the common difference is 3, Find the next 3 terms.

$$a_1 = -7$$
 $d = 3$

10. The first term is 6 and the common difference is -4. Find the next 3 terms.

11. The first term is 9 and the common difference is -4. Find the next 3 terms & the 100th term.



12. The first term is -6 and the common difference is 5. Find the next 3 terms & the 100th term.

a 100 = -4(100) +13