Independent Practice

Use words and symbols to describe the value of each term as a function of its position. Then find the value of the twelfth term in the sequence. (Examples 1–3)

1.

Position	3	4	5	6	n
Value of Term	12	13	14	15	▦

Function Rule : _____

$N_{12} =$

2.

Position	2	3	4	5	n
Value of Term	24	36	48	60	▦

Function Rule : _____

$N_{12} =$

3. Describe the relationship between the terms in the sequence 6, 18, 54, 162, ... Then write the next three terms in the sequence. (Example 2)

_____ , _____ , _____

4. The table shows the amount it costs to rock climb at an indoor rock climbing facility, based on the number of hours. What is the rule to find the amount charged to rock climb for x hours? (Example 4)

Function Rule : _____

Time (x)	Amount (AED)
1	13
2	21
3	29
4	37
x	▦

MP Identify Structure Determine how the next term in each sequence can be found. Then find the next two terms in the sequence.

5. 4, 16, 28, 40, _____ , _____

Show your work _____

6. 1.5, 3.9, 6.3, 8.7, _____ , _____

_____

7. $2\frac{1}{4}, 2\frac{3}{4}, 3\frac{1}{4}, 3\frac{3}{4},$ _____ , _____

_____

Find the missing number in each sequence.

8. 30, _____ , 19, $13\frac{1}{2}$, ...

9. 43.8, 36.7, [_____], 22.5, ...