

19. Consider the sequence: 7, 11, 15, 19,

a) What is the explicit rule?

$$a_n = 7 + 4(n-1)$$

b) What is the recursive rule?

$$a_n = a_{n-1} + 4$$

$$a_1 = 7$$

c) find the next 4 terms in the sequence.

7, 11, 15, 19, 23, 27, 31, 35...

20. Consider the sequence: 3, 9, 27, 81, ...

a) What is the explicit rule?

$$a_n = 3(3)^{n-1}$$

b) What is the recursive rule?

$$a_n = 3 \cdot a_{n-1}$$

$$a_1 = 3$$

c) Find the next 4 terms in the sequence.

3, 9, 27, 81, 243, 729, 2187, 6561...

Find the first 5 terms of each sequence.

21. Given $a_n = a_{n-1} + 7$ and $a_1 = 5$

5, 12, 19, ~~26~~, 33...

$$a_1 = 5$$

$$a_2 = 5 + 7$$

$$= 12$$

$$a_3 = 12 + 7$$

$$= 19$$

$$a_4 = 19 + 7$$

$$= 26$$

$$a_5 = 26 + 7$$

$$= 33$$

22. Given $a(n) = 2a(n-1)$ and $a(1) = 14$
2(previous term)

14, 28, 56, 112, 224

$$a(1) = 14$$

$$a(2) = 14(2)$$

$$= 28$$

$$a(3) = 28(2)$$

$$= 56$$

$$a(4) = 56(2)$$

$$= 112$$

$$a(5) = 112(2)$$

$$= 224$$