

6. If $f(1) = 6$, $f(x) = f(x - 1) \times 3$, write the first 5 terms of this sequence

_____ , _____ , _____ , _____ , _____

7. If $f(x) = -3x + 9$, then $f(13) =$ _____

8. Write the first five terms of the sequence represented by the equation $f(x) = 3x - 4$.

9. Write the explicit equation for the sequence $1, 2, 4, 8, 16, \dots$

$$f(x) = 3x + 2$$

10.

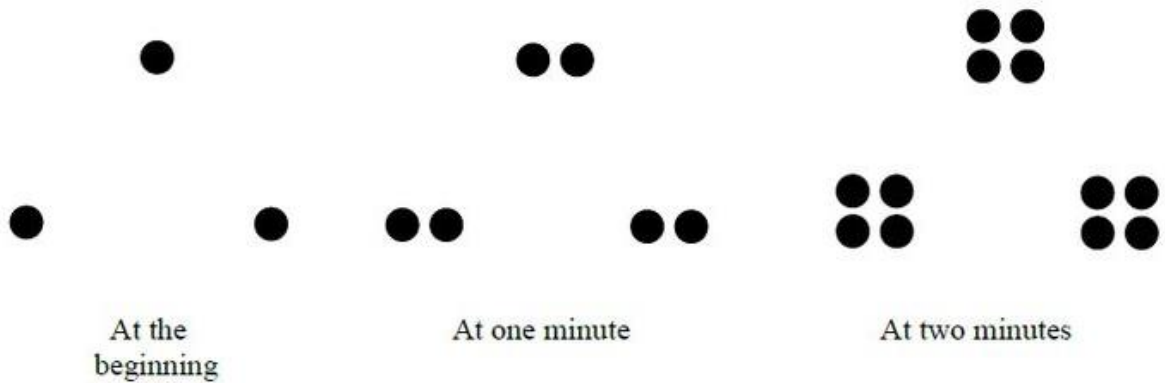
a. Write a short paragraph that compares and contrasts recursive functions and explicit functions.

b. Write the recursive form.

11. Given the sequence: 1,3,5,7 which form, explicit or recursive, would you use to find the 67th term?

Example why you chose the form, write the form, then find the 67th term.

Use the diagram below to answer questions 12-15



12. What type of sequences is represented above?

13. The recursive function is $f(0) = 3$ and

a. $f(x) = (x - 1) + 3$

b. $f(x) = (x - 1) \times 3$

b. $f(x) = (x - 1) + 2$

d. $f(x) = (x - 1) \times 2$

14. The explicit function is:

a. $f(x) = 2x$

b. $f(x) = 2x + 3$

c. $f(x) = 3(2)^x$

d. $f(x) = 2(3)^x$

15. How many dots will there be on day 6?