

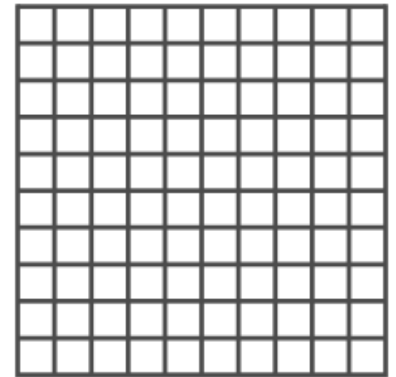
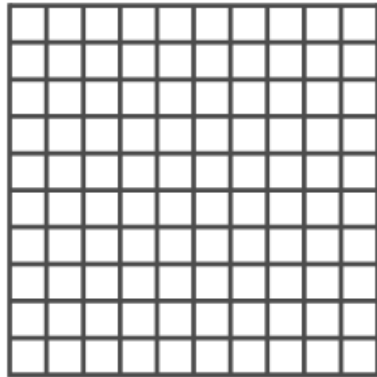
Use what you know about sequences to complete each problem.

1. What is the fourth term in the sequence given by $f(n) = 10n - 12$?

2. What is the fourth term in the sequence given by $a_n = a_{n-1} + 6$; $a_0 = -11$?

3. Graph the first 5 terms of the sequence given by $a_n = a_{n-1} \cdot 2$; $a_0 = 3$.

4. Graph the first 5 terms of the sequence given by $f(n) = -3n + 5$.

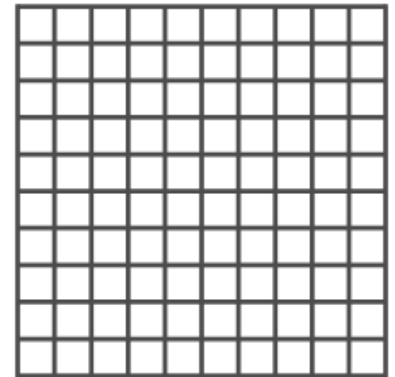
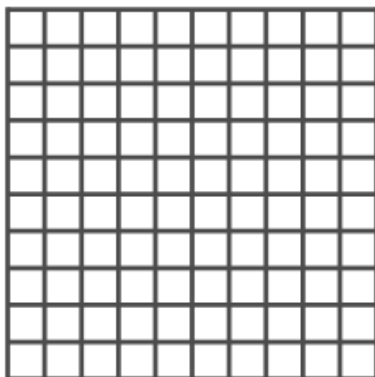


5. What is the third term in the sequence given by $f(n) = 5(3)^n$?

6. What is the fourth term in the sequence given by $a_n = a_{n-1} \cdot \frac{1}{4}$; $a_0 = 512$?

7. Complete and graph the sequence:
1, 3, 9, a_4 , 27

8. Complete and graph the sequence:
0, -3, -6, a_4 , -12



9. A radio show breaks for news every 30 minutes. After every fourth news report, the newscaster reads the daily sports highlights. If the radio show began at 12:01 p.m. and the first news report was read at 12:31 p.m., at what time will the daily sports highlights be read?
10. Water stations are set up periodically through a marathon route. After the first water station, the rest of the water stations are set up every 3.5 miles. If the first station is at the 5-mile mark, at what mile mark will the fifth water station be?

11. A sequence is generated by $f(n) = 3(2n) + 1$. What is the value of the fourth term?

12. If $a_n = a_{n-1} + 5$, and $a_3 = 9$, What is a_5 ?

13. $a_n = \frac{1}{3} \cdot a_{n-1}$; $a_2 = 243$ find $a_5 = 243$

14. $a_n = a_{n-1} - 100$; $a_6 = 1300$ find $a_{10} = 243$

Write the first four terms of the following sequences.

15. $a_n = a_{n-1} + 4$; $a_0 = -3$

16. $a_n = -2[a_{n-1}]$; $a_0 = 6$

17. $f(n) = -0.5n + 10$

18. $f(n) = 6(1.25)^n$

19. $a_n = a_{n-1} + 10$; $a_0 = -13$

20. $a_n = 4 \cdot a_{n-1}$; $a_0 = -3$