

1. Arithmetic; $a_1 = -7$, $a_n = a_{n-1} + 11$
2. Geometric; $a_1 = \frac{1}{4}$, $a_n = 2a_{n-1}$
3. -300, -30, -3, -0.3, -0.03....., -3×10^{-27}
4. 5, 12, 19, 26, 33,, 215
5. 2, 11, 29, 65, 137,, 4831838201
6. 3, 5, 8, 13, 21,3524578
7. $A_n = 4 + 6(n-1)$ 1026th term is 6154
8. $B_n = -3(1.5)^{n-1}$ 9th term is -76.89
9. -157600
10. 5.03×10^{12}
11. \$27.53
12. A. \$2500
B. \$1430.93
13. 2340 feet
14. Sum the first 40 terms of $2n + 2$ is 1720
15. 89
16. 1594322
17. 1.5
18. Not possible
19. 300 g
20. 150 is the initial height of drop. .15 means 15% of the previous height is lost each time.