

# Answer Key

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## Practice A

1. 4, 2, 0, -2, -4    2. 3, 15, 75, 375, 1875
3. 1, 7, 13, 19, 25    4.  $10, 5, \frac{5}{2}, \frac{5}{4}, \frac{5}{8}$
5. -2, -5, -14, -41, -122
6. 7, 9, 12, 16, 21    7. 2, 4, 16, 256, 65,536
8. 5, -4, 8, 1, 15    9. -1, 4, 19, 364, 132,499
10.  $a_n = 6(5)^{n-1}; a_1 = 6, a_n = (5)a_{n-1}$
11.  $a_n = 2(3)^{n-1}; a_1 = 2, a_n = (3)a_{n-1}$
12.  $a_n = 8\left(\frac{1}{2}\right)^{n-1}; a_1 = 8, a_n = \left(\frac{1}{2}\right)a_{n-1}$
13.  $a_n = -6 + 10n; a_1 = 4, a_n = a_{n-1} + 10$
14.  $a_n = 2 - 2n; a_1 = 0, a_n = a_{n-1} - 2$
15.  $a_n = 4 + 3n; a_1 = 7, a_n = a_{n-1} + 3$
16.  $a_1 = 3, a_n = a_{n-1} + 5$
17.  $a_1 = 2, a_n = 4a_{n-1}$
18.  $a_1 = 12, a_n = a_{n-1} - 9$
19.  $a_1 = 48, a_n = \frac{1}{2}a_{n-1}$
20.  $a_1 = 1, a_2 = 3, a_n = a_{n-1} + a_{n-2}$
21.  $a_1 = 1, a_n = (a_{n-1})^2 + 1$
22.  $a_1 = 50, a_n = (1.01)a_{n-1} + 56; \$766.56$
23.  $a_1 = 60, a_n = a_{n-1} + 16; \$112$