

# Answer Key

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## Test B

1. arithmetic;  $d = 3$
2. geometric;  $r = 2$
3. neither; no common  $d$  or  $r$
4. geometric;  $r = -3$
5. 0, 3, 8, 15, 24, 35
6. 2, 5, 8, 11, 14, 17
7. 10, 17, 26, 37, 50, 65
8.  $3125; 5^n$
9.  $28; 6n - 2$
10.  $-5; -n$
11.  $30; n(n + 1)$
12.  $\frac{1}{25}; \frac{1}{n^2}$
13.  $\frac{14}{3}; \frac{n + 9}{3}$
14.  $a_1 = 10; a_n = 0.5a_{n-1}$
15.  $a_1 = 1; a_n = a_{n-1} + 10$
16.  $a_1 = 22; a_n = \frac{a_{n-1}}{2}$
17.  $-15$
18. 1890
19. 420
20. 1364
21. 31
22.  $\frac{61}{27}$
23. 620
24.  $\frac{2}{3}$
25.  $\sum_{n=1}^5 (3n + 7)$
26.  $\frac{5}{11}$
27. \$46.50
28. about \$412,000