

# Answer Key

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## Test C

1. arithmetic;  $d = -6$
2. neither; no common  $d$  or  $r$
3. arithmetic;  $d = 1.5$     4. geometric;  $r = \frac{2}{3}$
5.  $0, -2, -4, -6, -8, -10$
6.  $0, \frac{3}{2}, \frac{8}{3}, \frac{15}{4}, \frac{24}{5}, \frac{35}{6}$     7.  $-6, 0, 6, 12, 18, 24$
8.  $4; n - 1$     9.  $\frac{7}{8}; \frac{n + 2}{n + 3}$     10.  $1024; 4^n$
11.  $125; n^3$     12.  $-\frac{6}{5}; \frac{n + 1}{-n}$     13.  $120; n!$
14.  $a_1 = 10; a_n = (2)a_{n-1}$
15.  $a_1 = -1; a_n = a_{n-1} - \frac{4}{3}$
16.  $a_1 = 55; a_n = \frac{a_{n-1}}{10}$     17.  $63$     18.  $-134$
19.  $195$     20.  $\frac{31}{32}$     21.  $\frac{1360}{81}$     22. about  $6.67$
23.  $500$     24.  $4$     25.  $\sum_{n=1}^{13} (-4 - 3n)$
26.  $\frac{11}{90}$     27.  $0.25$  meters    28.  $120$