

HW 4 - Review Lessons 1-3

Find the term named in the problem and the explicit formula.

- 1) $-19, -23, -27, -31, \dots$ $a_n = -15 - 4n$
Find a_{30} $a_{30} = -135$
- 2) $-22, -222, -422, -622, \dots$ $a_n = 178 - 200n$
Find a_{38} $a_{38} = -7422$

Find the term named in the problem.

- 3) $-22, -15, -8, -1, \dots$ $a_{38} = 237$
Find a_{38}
- 4) $9, 5, 1, -3, \dots$ $a_{40} = -147$
Find a_{40}

Given the first term and the common difference of an arithmetic sequence find the term named in the problem.

- 5) $a_1 = -15, d = 5$ $a_{35} = 145$
Find a_{33}
- 6) $a_1 = 30, d = 200$ $a_{33} = 6430$
Find a_{33}

Given a term in an arithmetic sequence and the common difference find the term named in the problem.

- 7) $a_9 = -1563, d = -200$ $a_{37} = -7163$
Find a_{37}
- 8) $a_{11} = -1024, d = -100$ $a_{22} = -2124$
Find a_{22}

Given two terms in an arithmetic sequence find the term named in the problem.

- 9) $a_{13} = -21$ and $a_{34} = -126$ $a_{24} = -76$
Find a_{24}
- 10) $a_{14} = 47$ and $a_{37} = 93$ $a_{32} = 83$
Find a_{32}

Evaluate each arithmetic series described.

- 11) $a_1 = -5, a_n = 40, n = 10$ $S_{10} = 175$
- 12) $a_1 = 22, d = 10, n = 9$ $S_9 = 558$
- 13) $7 + 17 + 27 + 37, \dots, n = 8$ $S_8 = 336$

Find the explicit formula.

- 14) $-3, -12, -48, -192, \dots$ $a_n = -3(4)^{n-1}$
- 15) $-4, -20, -100, -500, \dots$ $a_n = -4(5)^{n-1}$

Find the term named in the problem.

- 16) $-3, 9, -27, 81, \dots$ $a_{11} = -177147$
Find a_{11}
- 17) $-1, 3, -9, 27, \dots$ $a_9 = -6561$
Find a_9

Given the first term and the common ratio of a geometric sequence find the term named in the problem.

- 18) $a_1 = 3, r = 3$ $a_{12} = 531441$
Find a_{12}

Given a term in a geometric sequence and the common ratio find the term named in the problem.

- 19) $a_1 = 2, r = -2$ $a_{11} = 2048$
Find a_{11}

Given two terms in a geometric sequence find the term named in the problem.

- 20) $a_2 = 8$ and $a_3 = 32$ $a_{10} = 524288$
Find a_{10}
- 21) $a_6 = 243$ and $a_1 = 1$ $a_9 = 6561$
Find a_9