

Arithmetic Sequences WS #2

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Find the common difference, the 52nd term, and the explicit formula.

1) $-13, -5, 3, 11, \dots$

2) $12, 3, -6, -15, \dots$

Given the recursive formula for an arithmetic sequence find the common difference, the term named in the problem, and the explicit formula.

3) $a_n = a_{n-1} + 10$

$a_1 = -25$

Find a_{34}

4) $a_n = a_{n-1} + 6$

$a_1 = -37$

Find a_{34}

Given the first term and the common difference of an arithmetic sequence find the 52nd term and the explicit formula.

5) $a_1 = 7, d = 30$

6) $a_1 = 31, d = -30$

Given the second term and the common difference of an arithmetic sequence find the term named in the problem and the explicit formula.

7) $a_2 = -18, d = -6$
Find a_{35}

8) $a_2 = -41, d = -4$
Find a_{38}

Given a term in an arithmetic sequence and the common difference find the 52nd term and the explicit formula.

9) $a_{32} = -160$, $d = -5$

10) $a_{25} = 187$, $d = 7$

Given two terms in an arithmetic sequence find the 52nd term and the explicit formula.

11) $a_{12} = 1082$ and $a_{32} = 3082$

12) $a_{11} = 970$ and $a_{33} = 3170$

Find the missing term or terms in each arithmetic sequence.

13) ..., -2, ____, ____, ____, 398, ...

14) ..., -31, ____, ____, ____, ____, -46, ...