

Unit 5 Day 10 Warm Up

Determine if the sequence is arithmetic. If it is, find the common difference, the 52nd term, and the explicit formula.

1) $-20, -26, -32, -38, \dots$

2) $-13, -213, -413, -613, \dots$

3) $7, 17, 27, 37, \dots$

4) $99, 991, 9911, 99111, \dots$

5) $-16, -20, -24, -28, \dots$

6) $-1, -2, -6, -24, \dots$

Evaluate the related series of each sequence.

7) $17, 23, 29, 35, 41, 47$

8) $9, 11, 13, 15$

Unit 5 Day 10 Warm Up

Determine if the sequence is arithmetic. If it is, find the common difference, the 52nd term, and the explicit formula.

1) $-20, -26, -32, -38, \dots$

Common Difference: $d = -6$

$a_{52} = -326$

Explicit: $a_n = -14 - 6n$

2) $-13, -213, -413, -613, \dots$

Common Difference: $d = -200$

$a_{52} = -10213$

Explicit: $a_n = 187 - 200n$

3) $7, 17, 27, 37, \dots$

Common Difference: $d = 10$

$a_{52} = 517$

Explicit: $a_n = -3 + 10n$

4) $99, 991, 9911, 99111, \dots$

Not arithmetic

5) $-16, -20, -24, -28, \dots$

Common Difference: $d = -4$

$a_{52} = -220$

Explicit: $a_n = -12 - 4n$

6) $-1, -2, -6, -24, \dots$

Not arithmetic

Evaluate the related series of each sequence.

7) $17, 23, 29, 35, 41, 47$

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8) $9, 11, 13, 15$

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