Math 1 Name_____

PRACTICE Quiz 5.1 Arithmetic Sequences

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

1) −14, −12, −10, −8, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

2) −38, −68, −98, −128, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

3) −15, −215, −415, −615, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

4) 21, −79, −179, −279, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

Math 1 Name_____

PRACTICE Quiz 5.1 Arithmetic Sequences

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

1) −14, −12, −10, −8, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

Common Difference: $d = 2$
$a_{52} = 88$
Explicit: $a_n = -14 + (n - 1) \cdot 2$

2) −38, −68, −98, −128, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

Common Difference: $d = -30$
$a_{52} = -1568$
Explicit: $a_n = -38 + (n - 1) \cdot -30$

3) −15, −215, −415, −615, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

Common Difference: $d = -200$
$a_{52} = -10215$
Explicit: $a_n = -15 + (n - 1) \cdot -200$

4) 21, −79, −179, −279, ...

Is it arithmetic: _____

Common difference: _____

52nd term: _____

Explicit formula: a(n)=_____

Common Difference: $d = -100$
$a_{52} = -5079$
Explicit: $a_n = 21 + (n - 1) \cdot -100$