What Does It Mean? A Solidify Understanding Task



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Each of the tables below represents an arithmetic sequence. Find the missing terms in the sequence, showing your method.

X	1	2	3
у	5		11

	X	1	2	3	4	5
ĺ	у	18				-10

X	1	2	3	4	5	6	7
У	12						-6

Describe your method for finding the missing terms. Will the method always work? How do you know?



© 2012 Mathematics Vision Project | MVP In partnership with the Utah State Office of Education Licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported license Here are a few more arithmetic sequences with missing terms. Complete each table, either using the method you developed previously or by finding a new method.

3

4

2

1

x

~	_	_		0	-	
у	50				86	
	·		-			
Х	1	2	3	4	5	6
у	40					10
	•	•	•	•	•	•

X	1	2	3	4	5	6	7	8
у	-23							5

The missing terms in an arithmetic sequence are called "arithmetic means". For example, in the problem above, you might say, "Find the 6 arithmetic means between -23 and 5". Describe a method that will work to find arithmetic means and explain why this method works.



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