

# 1.9 What Does It Mean?

## A Solidify Understanding Task

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



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1.

$x$	1	2	3
$y$	5		11

2.

$x$	1	2	3	4	5
$y$	18				-10

3.

$x$	1	2	3	4	5	6	7
$y$	12						-6

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

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.

5.

$x$	1	2	3	4
$y$	50			86

6.

$x$	1	2	3	4	5	6
$y$	40					10

7.

$x$	1	2	3	4	5	6	7	8
$y$	-23							5

8. 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.