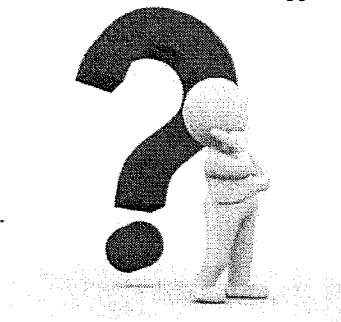


3.8 What Does It *Mean*?

A Solidify Understanding Task



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

x	1	2	3
y	5		11

x	1	2	3	4	5
y	18				-10

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

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.

x	1	2	3	4
y	50			86

x	1	2	3	4	5	6
y	40					10

x	1	2	3	4	5	6	7	8
y	-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.