

Strand: Algebra
Skill Addressed: Linear Relationships Explored
Activity: Part 3: Arithmetic Sequence

Name: _____
Blk: ____

The following are examples of Arithmetic Sequences:

3, 5, 7, 9, 11...
15, 10, 5, 0, -5...
13, 16, 19, 22, 25...

Consider the last example 13, 16, 19, 22, 25...
What do you notice about each subsequent term of this sequence?

What must you do to find the next missing term?

Arithmetic Sequence Definitions and Vocabulary:

Common Difference: the difference between any term and the term before it ex) $22 - 19 = \underline{\quad}$

First Term: the term where the sequence begins. Here the first term is 13.

The n^{th} Term: a general rule for finding any term of the sequence. For example, how could you find the 8th term? It may help to write a table:

Term #	1	2	3	4	5	6	...	n
Term Value								

Can you find a formula for the n^{th} term?