

How much do you understand about Arithmetic Sequences?

For each sequence, complete the following.

1. 3, 9, 15, 21, 27, 33, ...

- Is this sequence an arithmetic sequence?
- Describe how consecutive terms of the sequence change.
- Describe the sequence by stating a rule that can be used to continue the sequence. Use the formula for finding the n th term - $a_n = a_1 + d(n - 1)$.

d. Use your rule to make a table to illustrate the sequence.

Term									
Value									

- Plot the ordered pairs from your table on graph paper.
- Describe the shape of the graph.
- Does your graph represent a linear function?

2. 100, 90, 80, 70, 60, ...

- Is this sequence an arithmetic sequence?
- Describe how consecutive terms of the sequence change.
- Describe the sequence by stating a rule that can be used to continue the sequence. Use the formula for finding the n th term - $a_n = a_1 + d(n - 1)$.

d. Use your rule to make a table to illustrate the sequence.

Term									
Value									

- Plot the ordered pairs from your table.
- Describe the shape of the graph.
- Does your graph represent a linear function?

3. 1, 4, 9, 16, 25, 36, 49, ...
- a. Is this sequence an arithmetic sequence?
 - b. Describe how consecutive terms of the sequence change.
 - c. Describe the sequence by stating a rule that can be used to continue the sequence. Use the formula for finding the n th term - $a_n = a_1 + d(n - 1)$.

d. Use your rule to make a table to illustrate the sequence.

Term									
Value									

- e. Plot the ordered pairs from your table.
- f. Describe the shape of the graph.
- g. Does your graph represent a linear function?



