

# Class 9 Mathematics - Introduction to Linear Polynomials

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Advanced Worksheet 4

**Questions:** The table below shows a linear pattern.

<b>Stage Number</b>	1	2	3	4	5
<b>Number of Tiles</b>	6	10	14	18	22

1. What is the common difference?
2. How many tiles are needed for Stage 6?
3. How many tiles are needed for Stage 10?
4. Write a linear expression for the number of tiles at Stage  $n$ .
5. Is this a linear pattern?
6. Does the pattern show growth or decay?

## Answer Key

1. 4
2. 26
3. 42
4.  $4n + 2$
5. Yes
6. Growth