

Name _____

Date _____

Unit 9 · Sequences and functions — glossary

All 18 key words, with a worked example for each.

Term	Meaning	Example
sequence	A list of numbers in a definite order.	<i>3, 7, 11, 15, ...</i>
term	One of the numbers in a sequence.	<i>The 2nd term is 7.</i>
term-to-term rule	How to get from one term to the next.	<i>"Add 4".</i>
first term	The number a sequence starts at.	<i>3 in 3, 7, 11.</i>
common difference	The constant gap in a linear sequence.	<i>4 in 3, 7, 11.</i>
linear sequence	One whose gap is always the same.	<i>5, 9, 13, 17.</i>
nth term	A rule giving any term from its position.	<i>$4n - 1$.</i>
position	Where a term sits; $n = 1$ is the first.	<i>$n = 10$ for the 10th.</i>
coefficient	The number multiplying a letter.	<i>4 in $4n - 1$.</i>
substitute	Put a number in place of a letter.	<i>$n = 3$ gives 11.</i>
function	A rule turning each input into one output.	<i>$y = 2x + 1$.</i>
function machine	A diagram of a function as operations in order.	<i>$[\times 2] \rightarrow [+ 1]$.</i>
input	The number that goes in.	<i>x.</i>
output	The number that comes out.	<i>y.</i>
inverse	The operation that undoes another.	<i>$\div 5$ undoes $\times 5$.</i>
mapping diagram	Arrows from each input to its output.	<i>$1 \rightarrow 5, 2 \rightarrow 9$.</i>
square numbers	1, 4, 9, 16, ... from squaring.	<i>$5^2 = 25$.</i>
triangular numbers	1, 3, 6, 10, ... with gaps growing by 1.	<i>The next is 15.</i>