

The nth Term *ramp up*

ANSWERS

a Find the second difference of 3, 7, 13, 21, ... 2 the second difference	b Find the n th term of 1, 4, 9, 16, ... n^2 the square numbers	c Find the n th term of 4, 7, 12, 19, ... $n^2 + 3$ n^2 moved up	d Find the n th term of 3, 12, 27, 48, ... $3n^2$ half the second difference
e Find the n th term of 2, 6, 12, 20, ... $n^2 + n$ n^2 and a term in n	f Find the n th term of 6, 11, 18, 27, ... $n^2 + 2n + 3$ n^2 , a term in n and a number	g Find the n th term of 3, 3, 5, 9, ... $n^2 - 3n + 5$ a negative term in n	h Find the n th term of 2, 9, 20, 35, ... $2n^2 + n - 1$ a coefficient of n^2 of 2
i Find the n th term of 1, 3, 6, 10, ... $\frac{n^2}{2} + \frac{n}{2}$ a coefficient of n^2 of a half	j Find the n th term of 10, 7, 2, -5, ... $11 - n^2$ a negative n^2 term	k Which term of $n^2 + n$ is 110? <i>the 10th</i> which term a number is	l Find the n th term of $\frac{1}{2}, \frac{4}{5}, \frac{9}{10}, \frac{16}{17}, \dots$ $\frac{n^2}{n^2 + 1}$ a sequence of fractions

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