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| **Just for fun**  The first five terms for each nth term on the left can be found in the number jumble. Can you find them all?  clip_image001  **Revise at home**  Further support and practice is available on mymaths.co.uk    School login:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Password\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_    \*Booster packs  \*Six boosters  \*Sequences  \*Sequences revision (level 6) (lesson & online Worksheet)  \*Library  \*Algebra  \*Sequences  \* nth term (level 6) (lesson & homework task)  \* Quadratic sequences (level 7) (lesson & homework task) |  | **Name:**  **Finding the nth term of a sequence**  **Sequences level ladder**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | Level | Objective | G | A | R | | 7a | I can find the nth term of quadratic sequences |  |  |  | | 7c | I can find the next term of quadratic sequences |  |  |  | | 6a | **I can** **write an expression to describe the nth term of an arithmetic sequence.** |  |  |  | | 6c | I can generate terms of a sequence using term-to-term and position-to-term definitions of the sequence. |  |  |  |   **Key vocabulary**   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Sequence | Term | Generate | Arithmetic | Quadratic | Difference |   **Matching activity**  Use this table to record your answers.   |  |  |  | | --- | --- | --- | | **Sequence** | **nth term** | **Comments** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |
| |  | | --- | | **More Level 6**  **1** Find the next three terms in each of these sequences:  **a** 1, 5, 9, 13, \_\_\_\_, \_\_\_\_, \_\_\_\_, ……….  **b** 2, 9, 16, 23, \_\_\_\_, \_\_\_\_, \_\_\_\_, ………  **2** Write down the first four terms of the following sequences:    **a** 4*n* + 5  **b**  2*n* – 3  **3** Find the *n*th term of each of the following sequences:    **a** 8, 15, 22, 29, 36, …………  **b** 43, 51, 59, 67, 75, ………..  **c** 21, 19, 17, 15, 13,………….  **d** -11, -9, -7, -5, -3,……….. | |  | |  | | --- | | **Into Level 7**  **1** Find the next three terms in each of these sequences:  **a** 6, 12, 20, 30, \_\_\_\_, \_\_\_\_, \_\_\_\_, ……….  **b** 2, 5, 10, 17, \_\_\_\_, \_\_\_\_, \_\_\_\_, ………  **2** Write down the first four terms of the following sequences:    **a** *n*2 +5  **b** *n* (*n* +3)  **3** Find the *n*th term of each of the following sequences:    **a**  1, 4, 9, 16, 25, ……………..  **b** 3, 6, 11, 18, 27, ……………..  **c** 2, 8, 18, 32, 50…………….  **d** ½, 2, 4 ½, 8, 12 ½, …………. | |