**sequences**

**C**

**Pythagroas**

**GRADE BUSTER**

*Your ‘5 a day’ mathematical workout*

1. Find the nth term for the following sequences:

a) 3, 5, 7, 9, … b) 2, 7, 12, 17, … c) -1, 3, 7, 11, …

2. Find the nth term for the following sequences:

a) 11, 9, 7, 5, … b) 17, 13, 9, 5, …

3. Find 3 different sequences with nth term of the form ‘3n ± …’

4. i) Explain what is wrong with the following solution:

*3, 7, 11, 15, …*

*nth term is n +4*

Find the nth term of the sequence:

3, 7, 11, 15, …

**+4**

**+4**

**+4**

ii) Find the correct solution

5) Phil is building a stack of profiteroles.

He wants the stack to have 10 layers.

The top layer has 2 profiteroles, the second one has 5 and the third one has 9 profiteroles.

How many profiteroles will be needed for the 10th layer?

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| Qu |  | ☺ | ☹ |
| 1, 3 & 4 | I can find the nth term of an increasing sequence |  |  |
| 2 | I can find the nth term of an decreasing sequence |  |  |
| 5 | I can solve problems involving quadratic sequences |  |  |

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| Top tips I must remember for the exam: |
| ☺  ☺  ☺ |
| Types of questions I need to practise more: |
| ☺  ☺  ☺ |