1. Here are the first four terms in a number sequence.

| 5 | 8 | 11 | 14 |
| :--- | :--- | :--- | :--- |

Is 47 a term of the sequence?
You must give a reason for your answer.

1. ...............
2. Here are the first four terms of an arithmetic sequence.
$\begin{array}{llll}5 & 11 & 17 & 23\end{array}$
Is 75 a term of the sequence?
Explain how you got your answer.
3. ...............
4. Here are the first five terms of an arithmetic sequence.
$5 \quad 13$
21
29
37

Is 72 a term of the sequence?
You must give a reason for your answer.
$\qquad$
4. Here are the first five terms in a number sequence.

$$
\begin{array}{lllll}
9 & 16 & 23 & 30 & 37
\end{array}
$$

Jola thinks that the number 71 is in this sequence.
Is Jola correct?
You must show how you get your answer.
$\qquad$

Answers

1. yes and a method that could lead to the deduction e.g. add on a multiple of 3
2. no and a method that could lead to the deduction e.g. add on a multiple of 6 e.g. 71 and 77 are in sequence
3. no and a method that could lead to the deduction e.g. add on a multiple of 8 e.g. 69 and 77 are in sequence
4. no and a method that could lead to the deduction e.g. add on a multiple of 7 e.g. 65 and 72 are in sequence
