

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

8          16          24          32

Haydar says “If I double the 3rd term, I will get the 6th term”

Is Haydar correct?

Explain your answer.

1. ....

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

3          7          11          15

Evie says “If I double the 4th term, I will get the 8th term”

Is Evie correct?

Explain your answer.

2. ....

3. Here are the first five terms in a number sequence.

5          10          15          20          25

Aamir says “If I double the 5th term, I will get the 10th term”

Is Aamir correct?

Explain your answer.

3. ....

4. Here are the first five terms in a number sequence.

7      13      19      25      31

Igor says “If I double the 4th term, I will get the 8th term”

Is Igor correct?

Explain your answer.

4. ....

## Answers

1. Yes + a method that could lead to the deduction e.g. finds the 6th term ( 48) and  $2 \times 24 = 48$   
OR the sequence is  $8n$  and this is proportional
2. No + a method that could lead to the deduction e.g. finds the 8th term ( 31) and  $2 \times 15 \neq 31$   
OR sequence is  $4n - 1$  and this is not proportional
3. yes AND reason e.g. finds the 10th term ( 50) and  $2 \times 25 = 50$   
OR sequence is  $5n$  and this is proportional
4. no + a method that could lead to the deduction e.g. finds the 8th term ( 49) and  $2 \times 25 \neq 49$   
OR sequence is  $6n + 1$  and this is not proportional