

WJEC MATHEMATICS

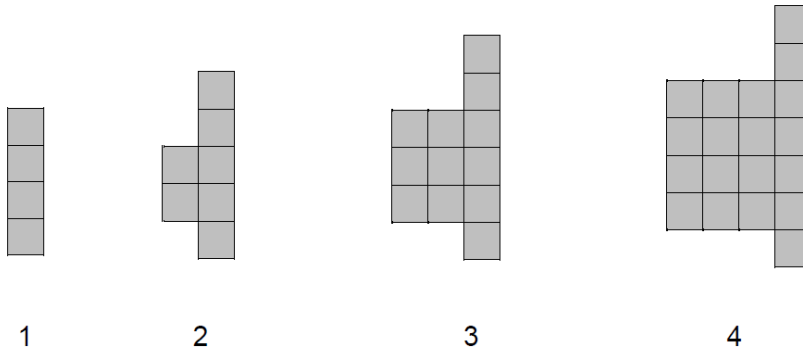
HIGHER
3 TIER TOPICS

SEQUENCES AND NTH TERM

@MrGoreMaths.

Spec 1 – Maths – P1

8. The diagram shows the first four patterns of a sequence.



Find an expression for the number of squares in the n th pattern of the sequence. [2]

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Nv 2016 – Maths – P2

2. The n th term of a sequence is given by $n^2 + 7$.

Write down the first three terms of this sequence. [2]

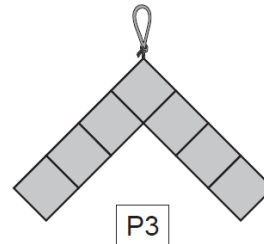
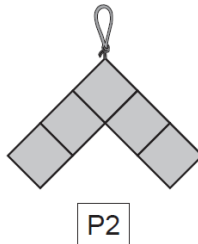
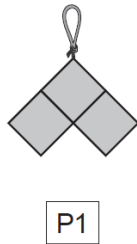
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1st term = 2nd term = 3rd term =

June 2017 – Numeracy – P1

4. Josef has a job in a workshop that makes decorations.

He has made the following three decorations using small squares of stained glass.



Josef labels these patterns P1, P2 and P3 in order.

Josef continues to make decorations following the pattern he has started.

(a) How many **more** squares would he need to make pattern P22 than to make pattern P18? [1]

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(b) Josef has 22 squares.

Josef states,
'I think I can make one complete decoration using **all** 22 squares, with none left over.'

Is Josef correct?

Yes No

Give a reason for your answer. [1]

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- (c) Each small square of stained glass measures 0.5 cm by 0.5 cm.
The perimeter of one of Josef's decorations is 10 cm.
Complete the label that Josef would use for this decoration.

[2]

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