



**Advanced Mathematics
Support Programme®**

Squared Squares

Squared Squares

Inspired by

Numberphile: <https://www.numberphile.com/>

and

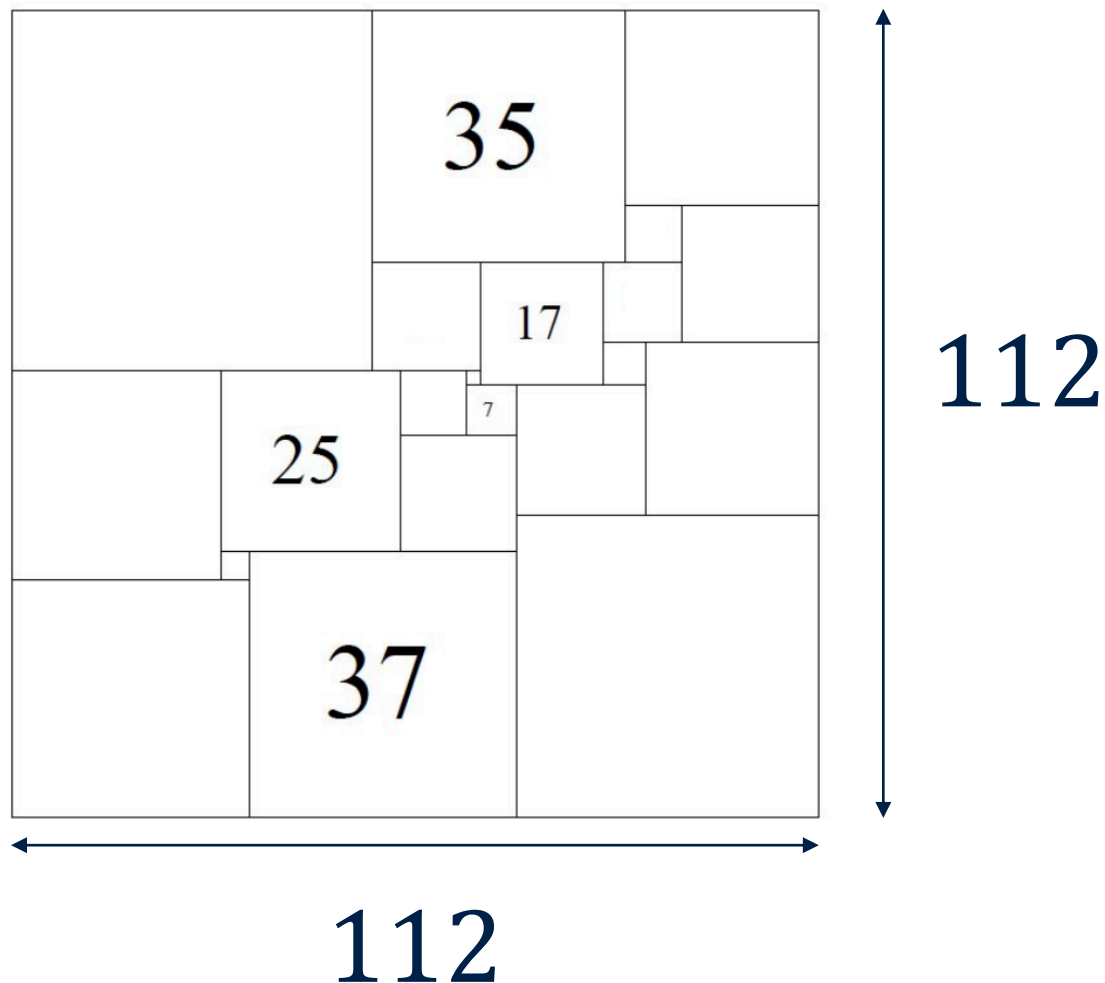
ThinkMaths: <https://www.think-maths.co.uk/>

Squared Squares Puzzle 1

Numbers in the squares are the **SIDE LENGTH** of the square they're in

The square they create has side length **112**

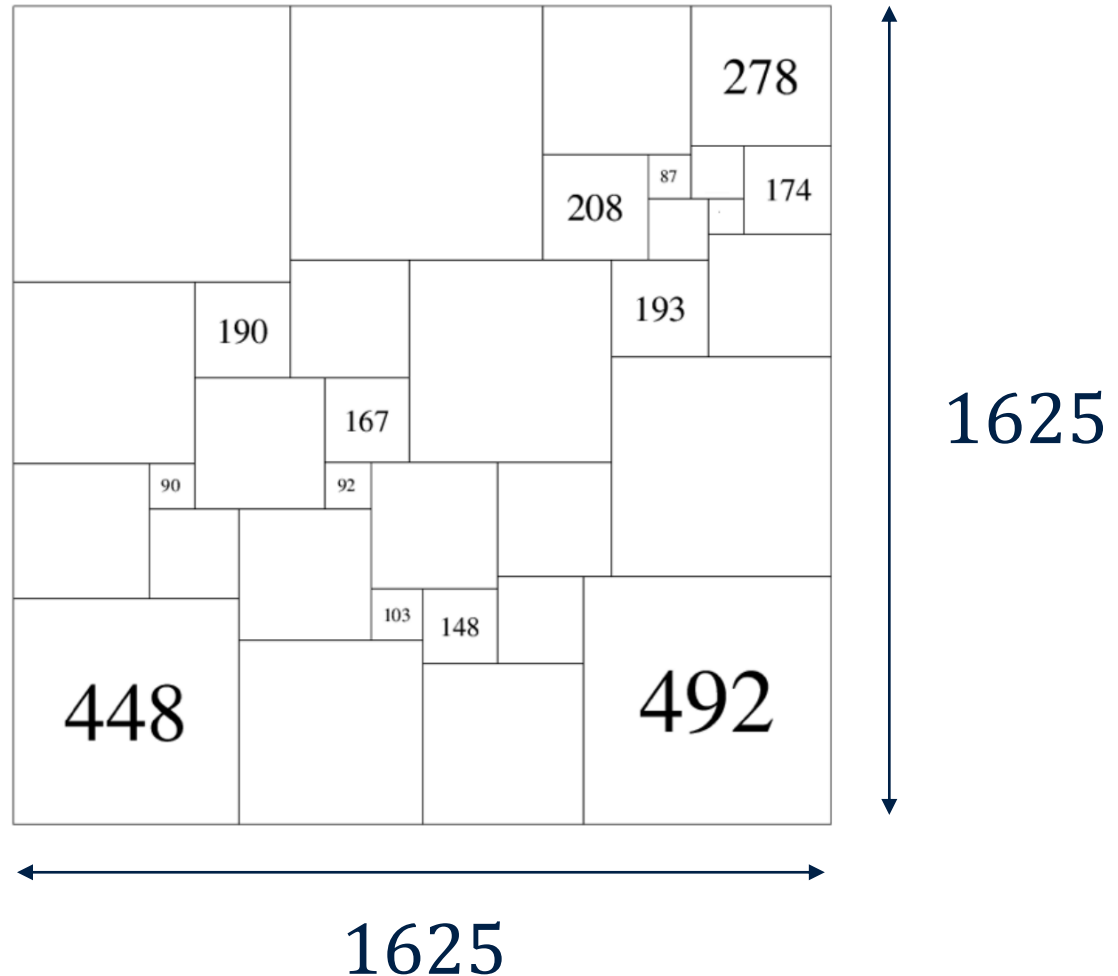
Deduce all the missing square sizes



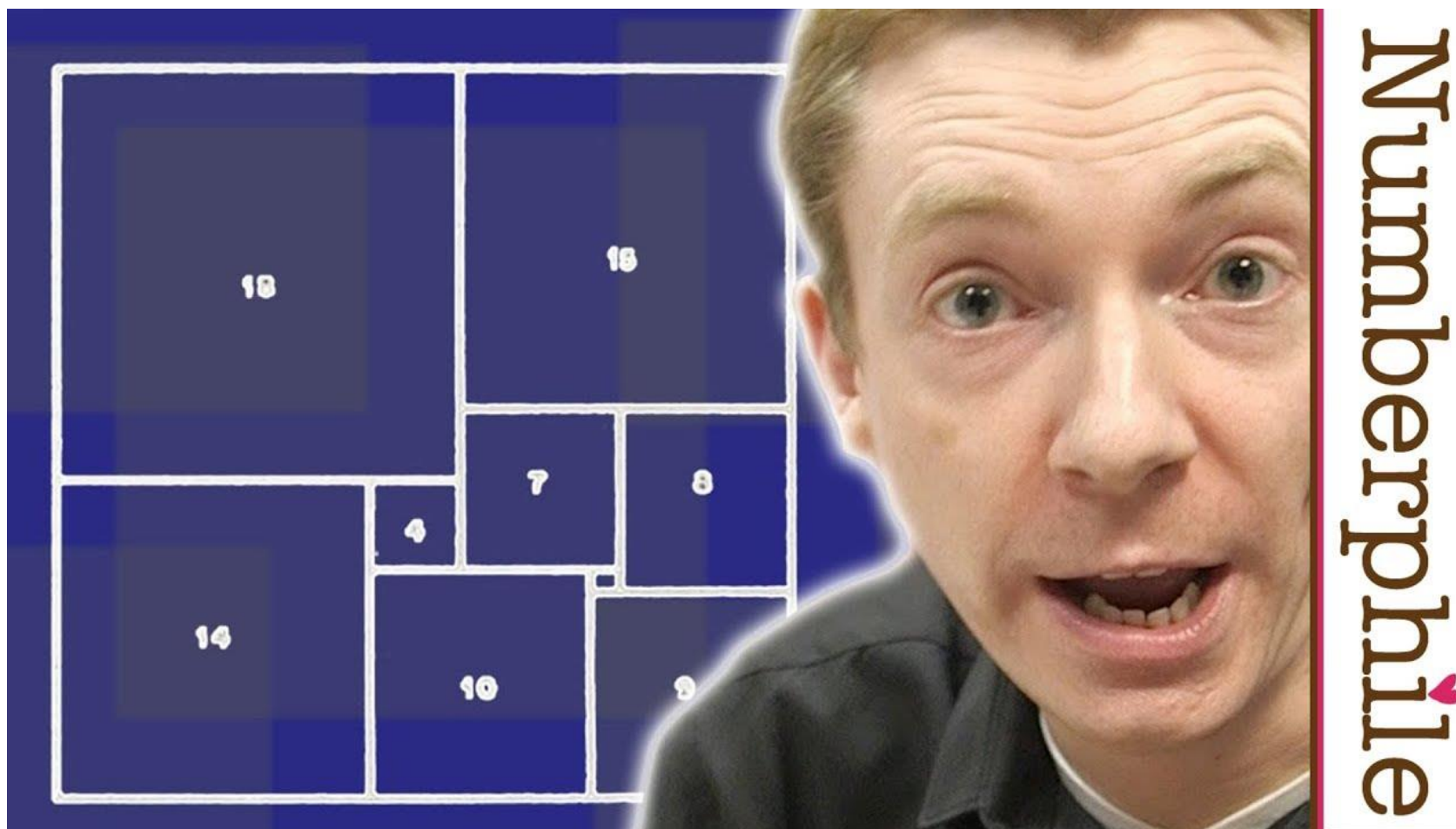
Squared Squares Puzzle 2

Numbers are the
SIDE LENGTH of the
 square they're in.

Deduce all the
 missing square sizes



Watch the Video

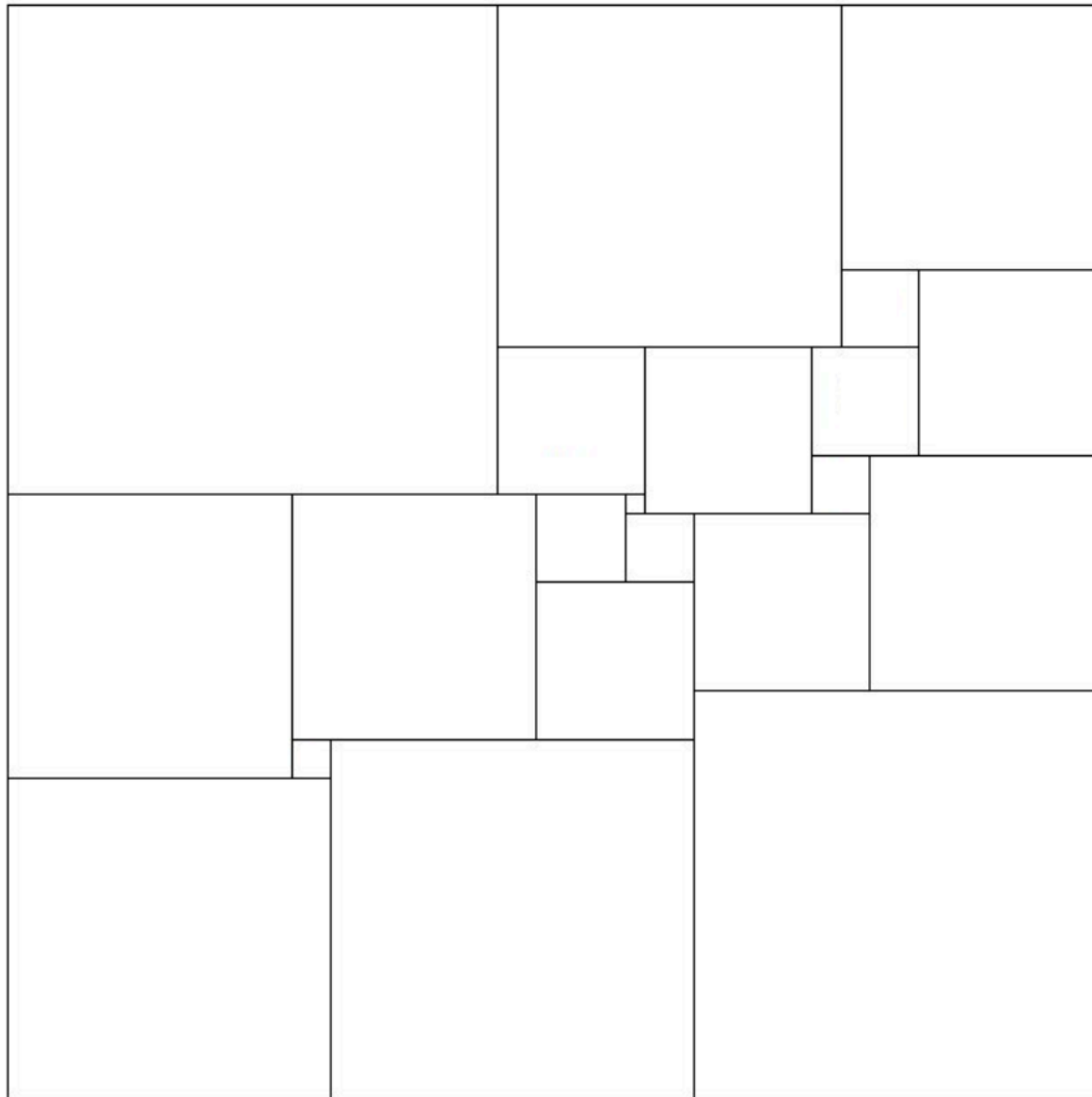


<https://youtu.be/NoRjwZomUK0>

Follow up challenges

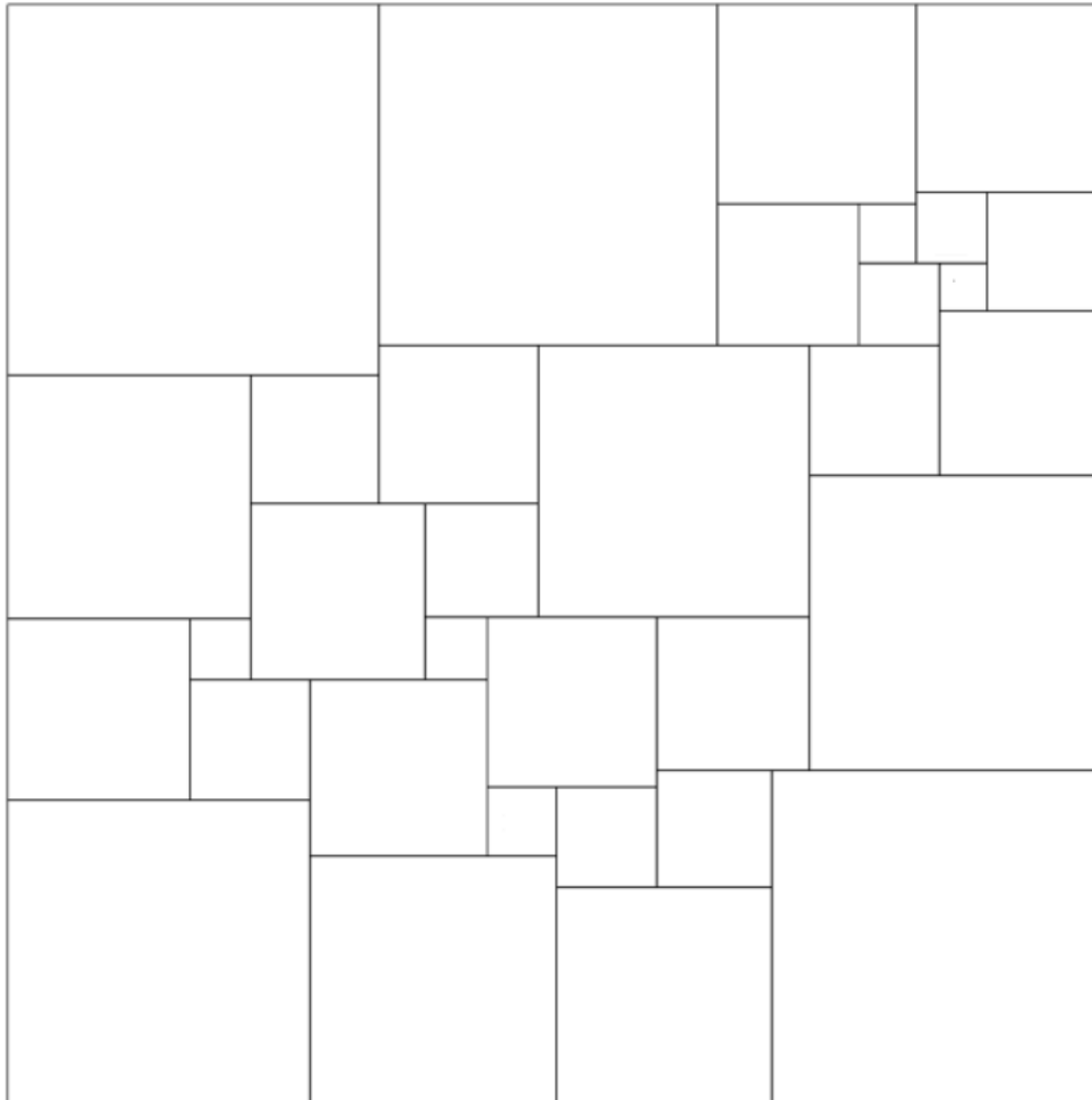
Colour the completed Squared Square puzzles on the next slides using only four colours (so that no two touching squares are the same colour)

Design your own Squared Square puzzle (use the blank grids, and fill in *some* of the correct numbers – what makes a puzzle hard/easy, possible/impossible?)



**Squared
Square
21:112A**

**Dimensions of
big square:
112 by 112**



**Squared
Square
33:1625A**

**Dimensions of
big square:
1625 by 1625**

Answers

- The answers for the colouring are here:

<https://www.think-maths.co.uk/sites/default/files/2020-02/Squared%20Square%20Solutions.pdf>

- You can create your own:

<https://www.think-maths.co.uk/sites/default/files/2020-02/Deduction%20Puzzles.pdf>

More stuff

The Four Colour Theorem

<https://youtu.be/NgbK43jB4rQ>

Numberphile



Squared Square

Results and history

<http://www.squaring.net/sq/ss/ss.html>

Contact the AMSP



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