

17 Squares



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[VIEW IN BROWSER](#)

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Summary

17 1 unit squares and a 4.7 unit square, to fiddle around with packing squares in squares.



0.41 hrs



1 pcs



0.25 mm



0.40 mm



PLA



5 g



Prusa MINI /
MINI+

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This is a tool to provide a physical example of packing 17 1x1 unit squares into a 4.7x4.7 unit square. It was inspired by this twitter exchange, which I came across on imgur:



João Eira @joaoeira · 12 dec. 2021



mAtHeMaTiCs Is BeAuTiFuL

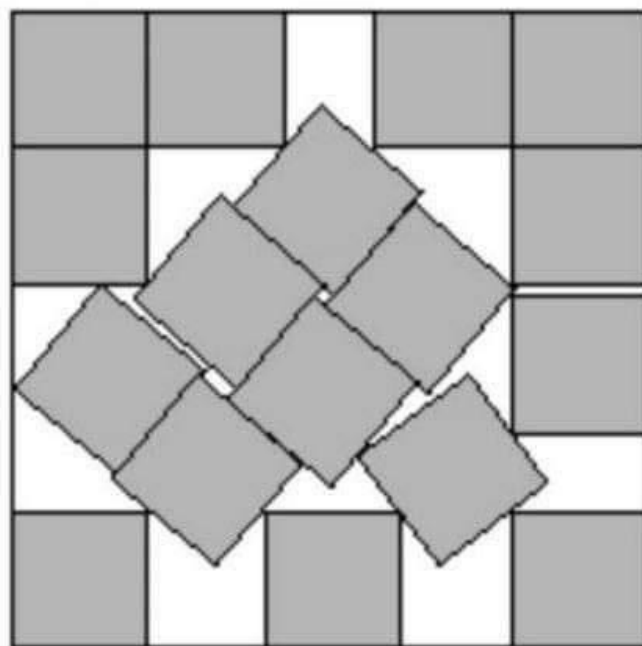


Dani... @Kangaro... · 10 dec. 2021

Seeing that this is the best way we know to fit this many equal squares inside a square makes me feel a bit better about struggling to fit the plates in the dishwasher!

[Visa denna tråd](#)

17.



$$s = 4.675+$$

Found by John Bidwell
in 1997.



1



The image used in that exchange was created by Erich Friedman and is available on [his website](#). In theory, 17 unit squares can pack into a 4.675 unit square, but I wanted to give it a little leeway when printing.

The print seen in the photos used 0.25mm layer height, using Overture Matte Green, sliced in PrusaSlicer, and printed on a Prusa Mini+. Support and infill settings should have no effect.

To be honest, at this scale it's very fiddly to play with. The pieces have a tendency to overlap when pushed together. But hey, it's enough to hand to a friend and challenge them to get all 17 squares to fit!

Model files



17-squares.3mf

Print files



17-squares_025mm_pla_mini_24m.gcode

🌀 PLA 📏 0.40 mm 📐 0.25 mm ⌚ 0.41 hrs 📊 5 g 🖨️ Prusa MINI / MINI+

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