

- **Objective:** Recognise that shapes with the same areas can have different perimeters and vice versa

Year 6 Task:

This task is taken from the NRich website. To view the task, follow the link:

https://nrich.maths.org/1045?utm_source=primary-map Included on the website are tips on how to get started and worked solutions. Enjoy!

Numerically Equal

Age 7 to 11 ★★

I want to draw a square in which the perimeter is numerically equal to the area.



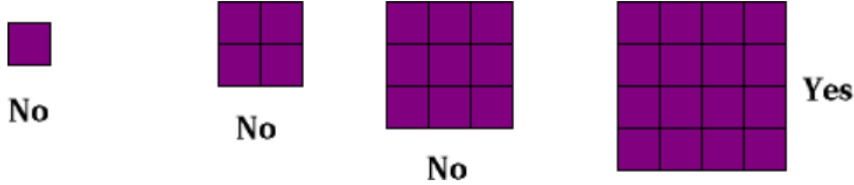
Of course, the perimeter will be measured in units of length, for example, centimetres (cm) while the area will be measured in square units, for example, square centimetres (cm²).

What size square will I need to draw?

What about drawing a rectangle that is twice as long as it is wide which still has a perimeter numerically equal to its area?

Examples of solutions and strategies from the NRich website:

The solutions that arrived on our desk for Numerically Equal all had the same answer, but slightly different ways of finding it. **Jack** of Tattingstone Primary School sketched the stages of his thinking.



Chris used addition to help him with the perimeter calculation:

$$4cm + 4cm + 4cm + 4cm = 16cm$$