- If n = 1 we have $x^2 + y^2 = z$ this is easy.
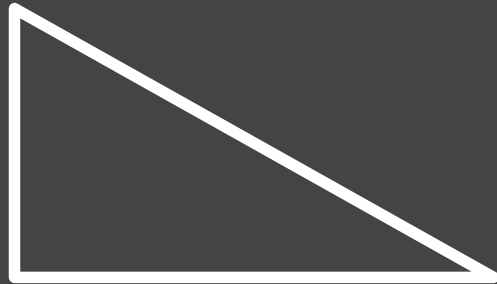
- For n = 2, we have $x^2 + y^2 = z^2$.

This is Pythagore!

$$x^2 + y^2 = z$$