

# Proof Without Words: The Cube as an Arithmetic Sum

$$1 = 1$$

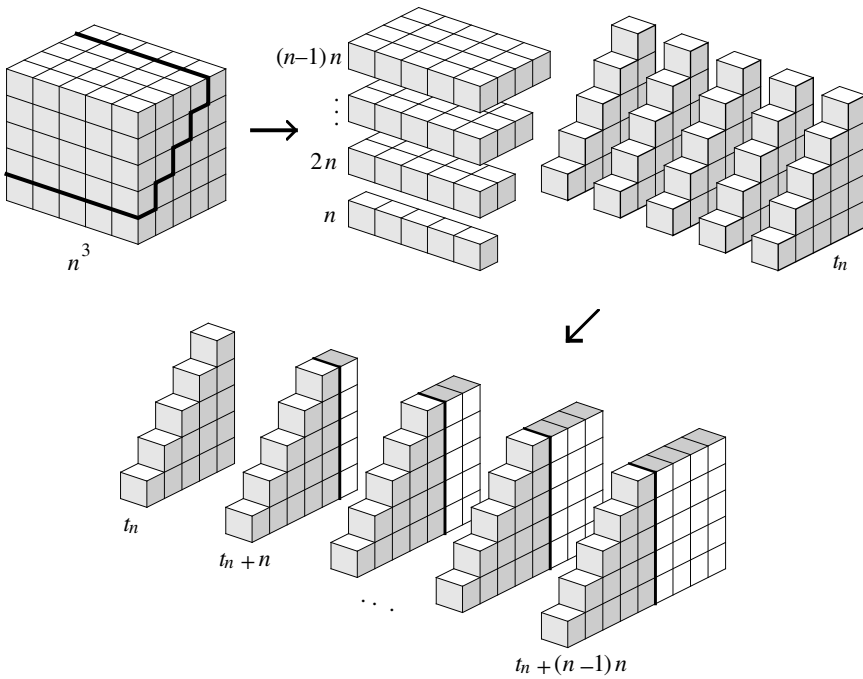
$$8 = 3 + 5$$

$$27 = 6 + 9 + 12$$

$$64 = 10 + 14 + 18 + 22$$

⋮

$$t_n = 1 + 2 + \dots + n \rightarrow n^3 = t_n + (t_n + n) + (t_n + 2n) + \dots + (t_n + (n - 1)n)$$



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