Book 9 Proposition 4

If a cube number makes some (number by) multiplying a(nother) cube number then the created (number) will be cube.

For let the cube number A make C (by) multiplying the cube number B. I say that C is cube.

For let A make D (by) multiplying itself. Thus, D is cube [Prop. 9.3]. And since A has made D (by) multiplying itself, and has made C (by) multiplying B, thus as A is to B, so D (is) to C [Prop. 7.17]. And since A and B are cube, A and B are similar solid (numbers). Thus, two numbers fall (between) A and B in mean proportion [Prop. 8.19]. Hence, two numbers will also fall (between) D and D in mean proportion [Prop. 8.8]. And D is cube. Thus, D (is) also cube [Prop. 8.23]. (Which is) the very thing it was required to show.