LONG-AGO PROBLEMS FOR THE STUDENT OF TODAY

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The famous problems of antiquity are three in number and concern remarkable constructions. These three, the trisecting of an angle, the duplicating of a cube, and the squaring of a circle, proved the source of devoted geometric pursuit and serendipitous findings to generations of mathematicians. Only in the nineteenth century were all resolved, each one in the negative.
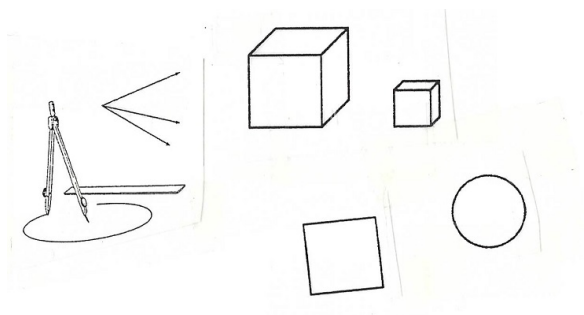

Figure 1. Famous Problems of Antiquity

These longstanding problems all imply extended problems of a highly generalized kind. Thus, can the general angle be divided into four or into five "equal" parts? Can a cube be triplicated or a circle triangulated? Let us now take another look at the THREE FAMOUS PROBLEMS OF ANTIQUITY, this time in the generalized setting.