

Editor's Note on Questions for Discussion

When a source text is presented with commentary or annotations, one normally finds helpful interpretations and explanations offered by a scholar with expertise in the relevant field, designed to make the going easier and make sure the reader knows the right understanding (which may be the current scholarly understanding) of the source text.

We've taken a different approach here. Instead of trying to make the study of Euclid easier by telling the reader what to think, we are trying to foster the most active engagement with Euclid's text. This means that our goal is to deepen rather than answer the questions which that active engagement will raise in the reader's mind while working through the text.

As a curious person in a new encounter with this classic thinker's beautiful logical geometrical structure, a reader has two choices at any moment in the encounter. One is to read through step by step in a basically mechanical way, noting the logic and following it, but accepting Euclid's claims and steps as coming from well-established authority. The other is to approach with wonder and with questioning of the process Euclid is unfolding here. This second approach means questioning not just his claims and steps, but wondering about how he is understanding his elements and his project. How is he seeing the process of making constructions and demonstrations? How does he see the relations of words and drawings, of terms like equality and area, of postulates and propositions? How does he use strategies of demonstration to satisfy a reader that what might seem plausible is indeed proved?

The questions for discussion offered in this book are ones that any such curious person in a new encounter might ask. They are questions many generations of students have in fact asked. They are thus ones that you might very likely ask without any recourse to the questions offered below the divider line in the text that follows.

So why have I offered so many sample questions to deepen the wonder and prod the critical mind? I have done so because sometimes people think that a geometric proof, or any mathematical demonstration, must be just a matter of working through mechanically, passively accepting

the logic, perhaps thinking that this endeavor is different from the way they might approach literature or philosophy, where they expect to find—and so actively look for—deep and rich questions and levels of meaning.

This failure to expect an opportunity for the sort of active engagement we typically expect when working with other sorts of texts is connected to the supposed great divide between science and math and the other humanities, as if scientific and mathematical thinking were not human thought. But mathematics *is* human thought, and the same lively engagement with the human mind that first expressed these thoughts (Euclid's mind, in this case) is as appropriate here as when encountering a work of literature or philosophy. Not sure about that? Not sure how you could have a discussion in a humanities class about a work of geometry? It is for you that I sketched out these sample questions.

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