

Parallel Postulate Quotes

I am becoming more and more convinced that the necessary truth of our [Euclidean] geometry cannot be demonstrated, at least not by the human intellect to the human understanding. Perhaps in another life, we shall obtain insights into the nature of space which are now beyond our reach.

Gauss, 1817

The assumption that the sum of the three angles of a triangle is less than 180 leads to a curious geometry, quite different from our own [the Euclidean], but thoroughly consistent, which I have developed to my satisfaction... The theorems of this geometry appear to be paradoxical and, to the uninitiated, absurd; but calm, steady reflection reveals that they contain nothing impossible... In any case, consider this a private communication, of which no public use or use leading to publicity is to be made. Perhaps I shall myself, if I have at some future time more leisure than in my present circumstances, make public my investigation.

Gauss, 1824

Do not waste an hour's time on that problem. It does not lead to any result; instead it will come to poison all your life... I believe that I myself have investigated all conceivable ideas in this connection.

Wolfgang Bolyai to his son John,

I am resolved to publish a work on parallels as soon as I can complete and arrange the material, and the opportunity arises. At the moment I still do not clearly see my way through, but the path which I have followed is almost certain to lead me to my goal, provided it is at all possible. I have not quite reached it, but I have discovered things so wonderful that I was astonished and it would be an everlasting pity if these things were lost. When you, my dear father, see them, you will understand. All I can say at present is that out of nothing I have created a strange new world. All that I have sent you previously is like a house of cards in comparison with a tower.

John Bolyai to his father, Wolfgang, 1823

It seems to me advisable, if you have actually succeeded in obtaining a solution of the problem, that, for a two-fold reason its publication be hastened: first, because ideas easily pass from one to another who, in that case, can publish them; secondly, because it seems to be true that many things have, as it were, an epoch in which they are discovered in several places simultaneously, much as the violets appear on all sides in the springtime

Wolfgang to John, 1825

It make take a very long time before I make public my investigations on this issue. In fact, it may not happen during my lifetime, since I fear the scream of the Boeotians [a figurative reference to the dullards, for the Boeotians were reputed to have been one of the more simple-minded Greek tribes] were I to completely express my views.

Gauss, 1829

In the past few weeks I have begun to write down some of my meditations [on the theory of parallels], a part of which I have never previously put in writing, so that already I have had to think it all through anew three or four times. But I wished that this should not perish with me.

Gauss, 1831

Let me add further that I have this day received from Hungary a little work on non-Euclidean geometry in which I find all my own ideas and results developed with great elegance, although in a form so concise as to offer great difficulty to anyone not familiar with the subject. I regard this young geometer Bolyai as a genius of first order.

Gauss, 1832

If I begin by saying that I dare not praise this work, you will of course be surprised for a moment; but I cannot do otherwise. To praise it would amount to praising myself. For the entire content of the work, the approach which your son has taken, and the results to which he is led, coincide almost exactly with my own meditations and which have occupied my mind for the past thirty or thirty five years.... It was my plan to put in all down on paper eventually, so that at least it would not perish with me. So I am greatly surprised to be spared the effort, and am overjoyed that it happens to be the son of my old friend who outstrips me in such a remarkable way.

Gauss to Wolfgang, 1832