

Re: History of trigonometry

Source: <http://sci.tech--archive.net/Archive/sci.math/2007-01/msg00260.html>

- *From:* Ken Pledger <ken.pledger@xxxxxxxxxxxxxx>
 - *Date:* Wed, 03 Jan 2007 11:30:47 +1300
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In article

<2386070.1166882761600.JavaMail.jakarta@xxxxxxxxxxxxxxxxxxxxxxxx>, zeros <nimzeros@xxxxxxxxxx> wrote:

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When did someone define the sine of an angle greater than 90 degrees?

I think this may have happened in 17c. But I can't find any record about my question....

It's an interesting question, which most popular historians of mathematics scarcely mention.

The trigonometric functions defined for all real numbers (angles), and the fact that those functions are periodic, are clearly treated in Euler's classic "Introductio in Analysin Infinitorum" (1748). There's an English translation by John D. Blanton, but I haven't been to our library to look at it. My guess (and it's only a guess) is that Euler was probably the first to use general angles in this way, although possibly someone earlier may have considered positive obtuse angles (between 90 and 180 degrees).

Ken Pledger.

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