

Re: On the multiplication of negative numbers

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- *From:* The TimeLord <math-n-physics-not@xxxxxxx>
 - *Date:* Mon, 28 Jul 2008 15:20:44 -0500
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Am Mon, 28 Jul 2008 07:07:11 -0700 schrieb Raghar <RagharA2@xxxxxxxxxx> in
644bc2e6-2142-4727-84f4-cca11536171f@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx:

On Jul 27, 11:18 pm, Uncle Ben <b...@xxxxxxxxxxx> wrote:

which shows that $(-1)*(-1) = 1$. Ta-dah!

As a gift, we get $\text{sq.rt.}(1) = -1$, Of course we already knew that $1*1=1$, so we have discovered by this simple and obvious means that numbers can have two different square roots.

You lost some information in the above series of equations. A $\text{SQRT}(1) = 1$. If you'd like to obtain an result -1 from squaring 1, you must add that lost information yet again. Aka $e*\text{SQRT}((a*a))$ where $e = a \gg 63$ (for signed 64 bit integers). A multiplication is defined as $a = b*c$. $a = \text{SQRT}(b)$ contains only one element, thus it can't be bijective without correction factor.

The ambiguity is not a fault of the function, it's rather fault of mathematicians. (They are accustomed to certain traditions, and are SOOOOOOOOO last century.)

I don't think that the programming issue is what the original question was about. As for mathematicians being soooooo last century, give a non-engineering/non-computer/non-number way of explaining why a negative times a negative should or should not equal a positive.

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// The TimeLord says:
// Pogo 2.0 = We have met the aliens, and they are us!