Mathematical Haiku

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Maths haikus are hard All the words are much too big Like homeomorphic.

Some observations on abstract algebra...

Fields, groups, semirings Who remembers which with which? Pesky axioms!

Fields can add, subtract And multiply and divide But not by zero

Rings are just like fields except for the division Well, you know... kind of

Module is to ring as vector space is to field. What analogy!

A proof that $\sqrt{2}$ is irrational

Suppose rational Let fraction be p on q hcf is 1

Square both sides and so $\frac{p^2}{q^2} = 2$ Read: p squared on q squared is 2 then multiply out.

But then p's even... ... But then q's even! Bang! wow! Like freakout! Pigs fly! Woe, too much to take. So now spare a moment few. Poor Pythagoras

Firstly, an introduction to Lebesgue integration... (more on this later)...

Countable subset G-delta μ -measurable Yeah! Lebesgue's the man!

How cool is maths?

Maths is really cool Really really really cool I like it alot

And now for my work on topology...

Group presentation Quotient space by inclusions Van Kampert is cool

Continuity: Open pre-image open Or by epsilons.

A Mobius strip Is not orientable Idea for boob tube.

Orientable: Bug walking along surface Not turned upside-down

 $\ldots {\rm And}$ my treatment of field extensions and ruler-and-compass constructions \ldots

An ode to constructability in triumvirate of Haiku

Ruler and compass Degree of field extension Must be power of 2.

Squaring the circle! Ha ha you stupid doofus! π transcendental!

Duplicating cube? $[\mathcal{Q}(\sqrt[3]{2}):(Q)]$ Read: 'Q cube root of two to Q' Degree three, not two!