Re: Peano's space−filling curve

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>>So now, assume f:A−>B is a one−to−one correspondence and so is
>>f':A'−>B'.

>Under the circumstances it probably would be better not
>to corrupt the notation. In the problem we were given
>A ~ A' and B ~ B', not A ~ B and A' ~ B'. So it's
>f : A −> A' and g : B −> B', and then F(x,y) = (f(x), g(y)).

>(I actually think the literally correct F((x,y)) would be
>better than the F(x,y) that a person would typically write,
>although it's maybe not clear which is going to cause
>less confusion.)

Good points. Well taken.

>>>>[...]So how about F(x,y)=(f(x),f'(y))?

>Well, my opinion is that he would have eventually got
>this himself (because once we get straight exactly
>what we know and exactly what we're trying to do
>it's more or less the only thing to try), and if
>he had got it himself he would have attained a
>deeper understanding.

>Otoh you may be right (or rather what I imagine your
>motivation in giving it away may be right) − if this
>is our first time with this sort of abstraction we
>need more than the hints I was giving.

I saw your tactic and gave him some time to think about it
a bit. Since it wasn't obvious to him (and it should have been),
I thought a nudge would do him good. He still has to show
that the new function is a one−to−one correspondence, so
there's plenty of chances to learn. :)

Again, point well taken.

−−Dan Grubb