Re: Looking for a surjection or R^2

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- *From*: lrudolph@xxxxxxxxx (Lee Rudolph)

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I wrote:

....

> As before, identify R^2 with C, and let p(z)=z^3−3z. Then p is a
> 3−sheeted irregular branched cover of C over C, with critical points
> 1 and −1, and critical values −2 = p(1) = p(−2) and 2 = p(−1) = p(2).
> The preimage p^{−1}(R), call it G, is the union of R and two (real)
> parabolas

which is of course wrong−−with z = x+iy as usual, G is the zero−set
of y(3x^2−y^2−1), so it's the union of R and the two branches of a
hyperbola.

Lee Rudolph

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