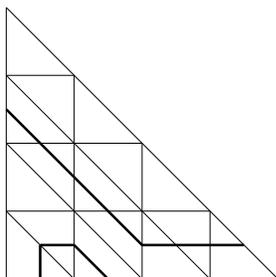


Comprehension questions

PROBLEM 24.1. Suppose that we change one sign in (24.5), from $-txy$ to $+txy$. Draw the outcome of patchworking for that case (for the whole zero-set, not just the positive quadrant).

PROBLEM 24.2. Is it possible for patchworking to produce an algebraic curve all of whose components are ovals (meaning, with no unbounded components?)

PROBLEM 24.3. Complete the following patchworking picture to one that shows all of $f_t(x, y) = 0$.



PROBLEM 24.4. Where would the negative roots of $p_t(x) = 1 - x + tx^2 + t^3x^3 + t^6x^4 + t^{10}x^5$ be located, approximately, for small t ?

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18.900 Geometry and Topology in the Plane
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