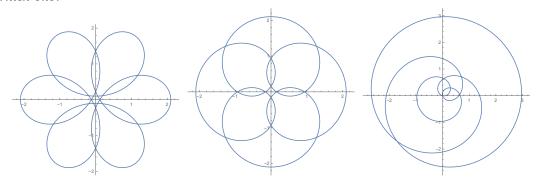## Comprehension questions

PROBLEM 14.1. *What is the multiplicity of $f(z) = z^7 - z^6 - 3z^5 + 3z^4 + 3z^3 - 3z^2 - z + 1$ at 1?*

PROBLEM 14.2. *Two of the following pictures are $f(e^{it})$ for a complex polynomial, and one isn't. Which one?*

PROBLEM 14.3. *What is the winding number of $t \mapsto (e^{2it} - \frac{1}{2})^3 (e^{3it} - 2)^4$ around the origin? Do this without graphing the loop, just from the formula!*

18.900 Geometry and Topology in the Plane
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