

Comprehension questions

PROBLEM 25.1. *In ordinary arithmetic, we have $a + (b + c) = (a + b) + c$, $a(bc) = (ab)c$, $a(b + c) = ab + ac$. Do the analogues of these rules hold in the tropical numbers?*

PROBLEM 25.2. *What's the tropicalization of $x^2 - y^2 = 0$, and what does its solution set look like?*

PROBLEM 25.3. *What's the tropicalization of $1 + x^3 + y^3 - sxy = 0$, and what does its solution set look like?*

MIT OpenCourseWare
<https://ocw.mit.edu>

18.900 Geometry and Topology in the Plane
Spring 2023

For information about citing these materials or our Terms of Use, visit: <https://ocw.mit.edu/terms>.