Mathematics 3260H – Geometry II: Projective and Non-Euclidean Geometry TRENT UNIVERSITY, Fall 2019

Assignment #7 Poems with(out) parallels? Due on Monday, 28 October.

1. Write a poem touching on the parallel axiom. [10]

By way of examples:

"Parallel lines meet at infinity," Euclid repeatedly, heatedly urged, Until he died and so reached that vicinity– In it he found that the damn things diverged.

Piet Hein

If the Númenoreans had been mathematicians

Tall ships and tall kings Three times three, What brought they from the foundered land Over the flowing sea? Seven points and seven lines In one geometry: Every point met three lines, Every line met points three, Every pair of points connected, Every line pair intersected. Every line pair intersected. Fano found it, Fano named it.

Stefan Bilaniuk, with apologies to J.R.R. Tolkein*

 $^{^{*}}$ "Tall ships and tall kings/ Three times three,/ What brought they from the foundered land/ Over the flowing sea?/ Seven stars and seven stones/ And one white tree."

We'll switch the due dates for our weekly assignments to Mondays instead of Thursdays so that we can make more effective use of our seminars.