

Mathematics 3260H – Geometry II: Projective and Non-Euclidean Geometry  
TRENT UNIVERSITY, Fall 2021

Assignment  $\#\tau = 2\pi$   
Unparalleled Poetry Expected Here!  
*Due on Tuesday, 2 November.*

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

Note: This is an extra assignment which would give you a larger pool from which the best five ten are chosen to count towards the final mark. Really, though, it's just to have something fun to do over Reading Week! :-)

*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.  
Fano found it, Fano named it.*

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

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\* . . . the rhyme of lore recited by Gandalf to Pippin in their ride from Rohan to Gondor – “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.” – might have been a little different.