PMU 199 Aha! Mathematical Discovery and Creative Problem Solving
Assignment 5

Prof. McCann   Due: 2 pm Thursday Feb. 25, 2021

RECALL: Feb 15-19 is Reading Week! No lectures or office hours.

NOT TO BE HANDED IN:

Read Sections 4.5 and 6.2 of 4th ed. (or equivalently §5.4 of 3rd) and Thurston's article linked at `www.math.toronto.edu/mccann/199`

§6.2 # 17, 29, 30, 31, 33

Construct 3 dimensional models of the 5 platonic solids. These can be made from paper and tape, or from other materials if you prefer (e.g. straws and wire,...) Use them to fill in the chart on page 276 of 4th ed and bring them to class on Feb 26.

Be prepared, as usual, to be quizzed on this material.

TO BE TURNED IN :

§4.5 # 19, 21

§6.2 # 28, 35 of 4th ed. (§5.4 of 3rd ed.)

Plus the following challenge question: There are three houses, and each has a gas line (running from the gas company) and an electric line (running from the electric company), and a water line (running from the water company). Even allowing the lines to be be curved instead of straight, prove it is impossible to draw all the lines in the plane without having some of the lines cross one another.

NB: Your second journal entry is due by midnight Friday 26 Feb 2021.