

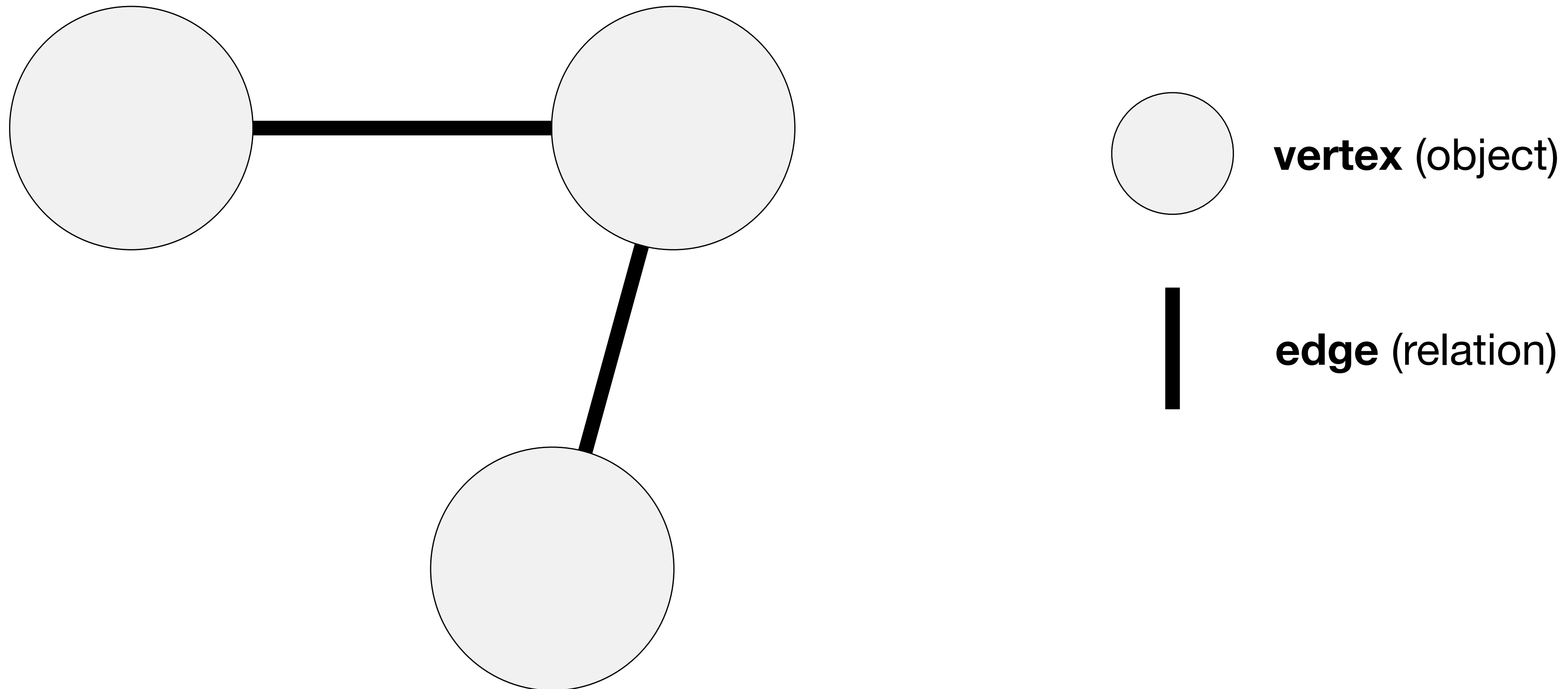
Tight Forests and the Chromatic Polynomial

Miliano Mikol

Research Adviser: Dr. Joshua Hallam, Ph.D, Mathematics

“Graph”

a structure that expresses relations



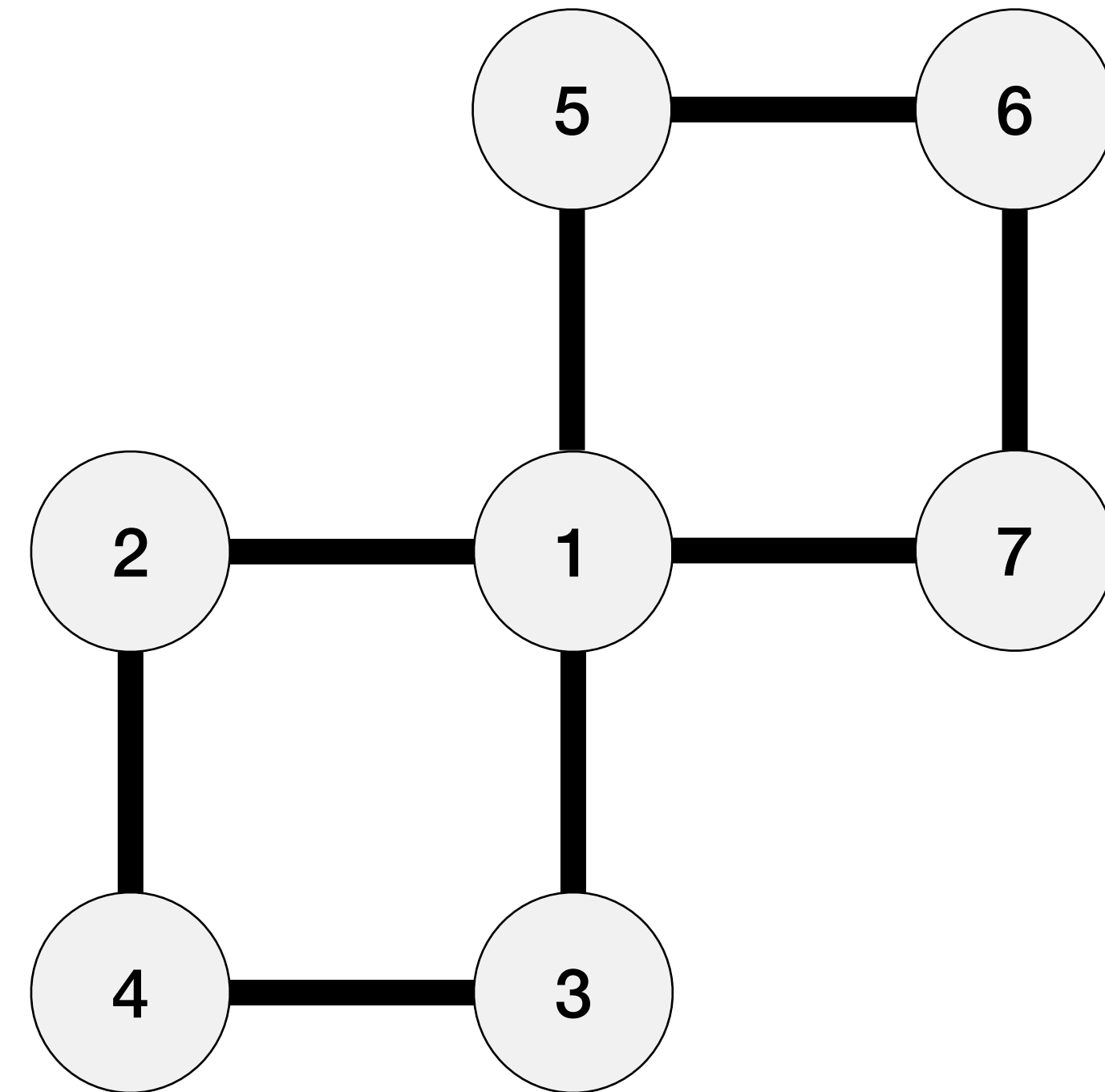
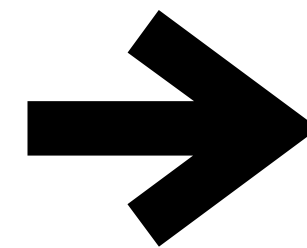
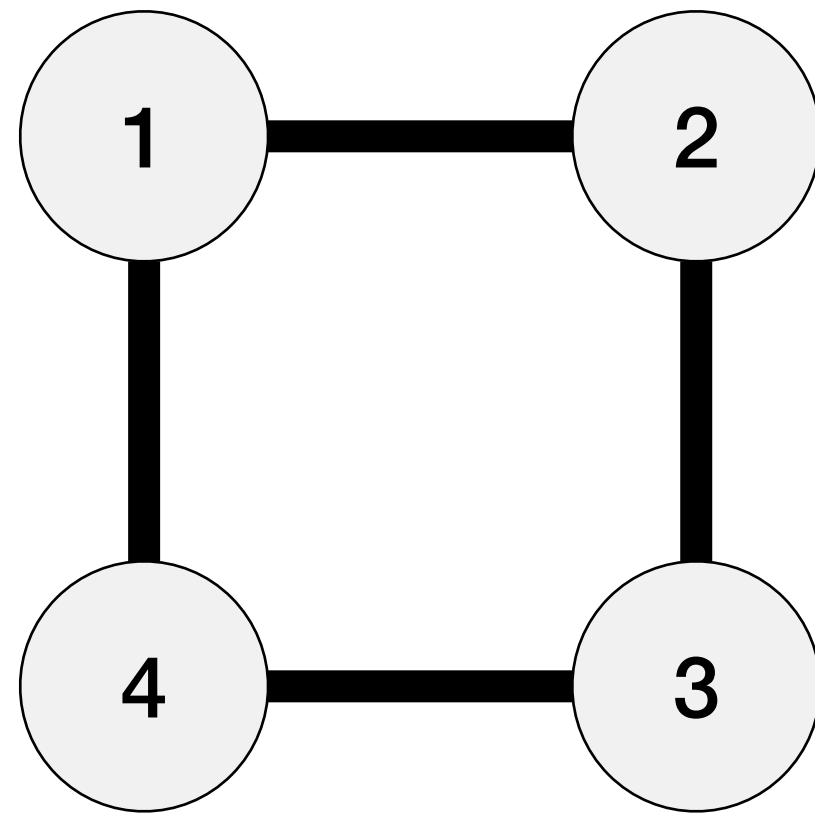
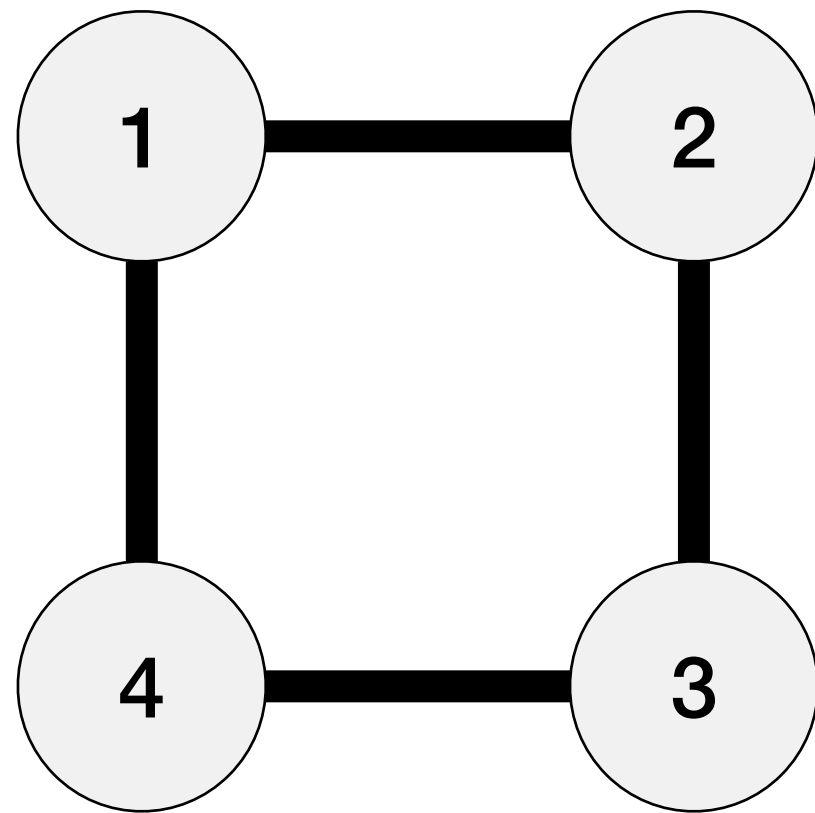
Objective

find the special graphs that make this equation true

$$TF(G, t) = (-1)^n \chi(G, -t)$$

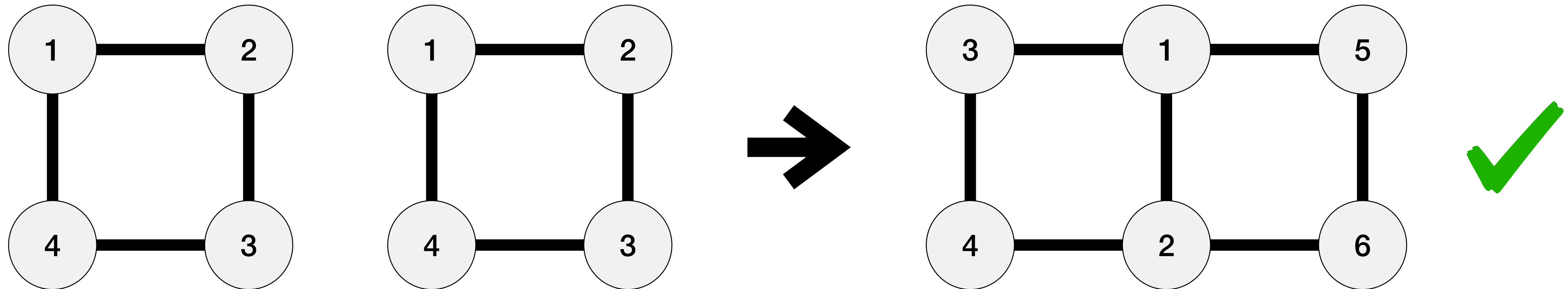
Theorem Proven

building a special graph by gluing on a vertex



Theorem Proven

building a special graph by gluing on an edge



Future Work

different cases of gluing

Can we glue along trees?

Method

my first six weeks of summer

Literature Review, Learning, Practicing

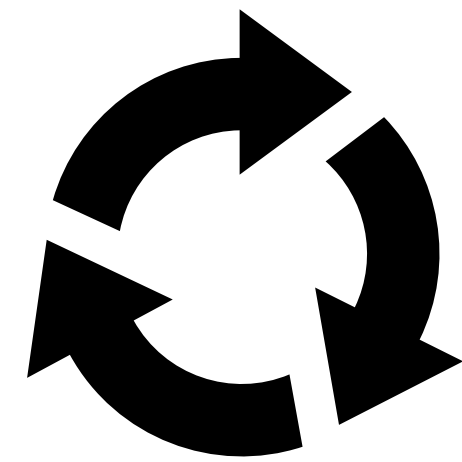
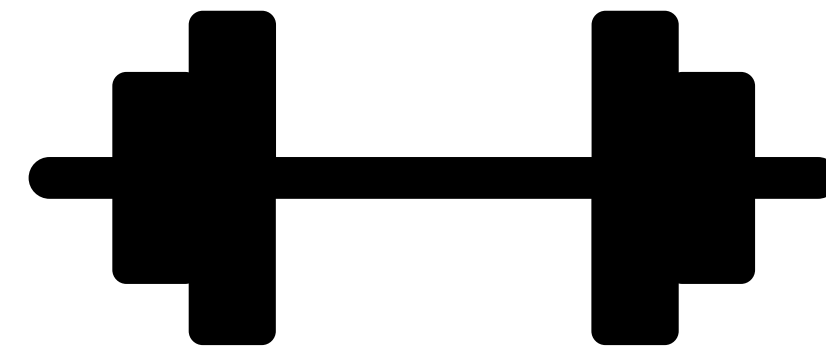
Programming, Testing, Optimizing

Experimenting, Analyzing, Proving

Lessons Learned

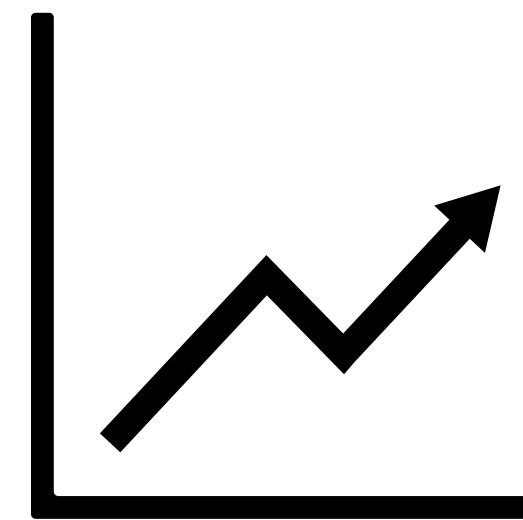
in addition (pun intended) to a lot of cool math

Health first



Persevere through mistakes

Results require work



Thanks, Josh!
Thanks, McNair!