Worksheet # 7

MATH 294 ESP Workshop

Spring 2016

See the attached paper *Recounting the rationals* by Calkin and Wilf.

Problem 1. Fill in the next row of the tree in figure 1.

Problem 2. Prove *The numerator and denominator at each vertex are relatively prime.*

Problem 3. Prove *Every reduced positive rational number occurs at some vertex.*

Problem 4. Prove *No reduced positive rational number occurs at more than one vertex.*