MT 430 Intro to Number Theory
PROBLEM SET 6

Due Tuesday 3/26

Problem 1. Evaluate the infinite continued fractions:
(1) $\langle 2, 3, 1, 1, 1, 1, \cdots \rangle$
(2) $\langle 2, 1, 2, 1, 2, 1, \cdots \rangle$
(3) $\langle 1, 3, 1, 2, 1, 2, 1, 2, \cdots \rangle$

Problem 2. Find the irrational number having continued fraction expansion $\langle 9, 9, 18 \rangle$.

Problem 3. Expand $\sqrt{15}$ into an infinite simple continued fraction.