

Fall 2021, Math 620: Week 2 Preliminary Problems
Due: Thursday, September 2nd, 2021
Permutation Groups

Preliminary problems. These problems should be completed before discussion on Thursday.

(P1) Write all 6 elements of S_3 in permutation notation.

(P2) Write all 6 elements of S_3 as products of disjoint cycles.

(P3) Write each element of S_3 as a product of 2-cycles (use the min possible number of 2-cycles).
Note: for 4 of the 6 elements, your answer should be identical to part (b)!