## Spring 2019, Math 320: Preliminary Problem Set 8 Due: Thursday, March 21th, 2019 Catch-up Week

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

(P1) Write down (in full) any 2 "big" or "very important" theorems covered in class so far.

(P2) Suppose R and S are rings. Write down the requirements for a function  $\phi : R \to S$  to be an isomorphism (write out the full definition of words like "one-to-one" or "onto").