Math 3040 Discussion questions, Oct. 18, 2019

1. Let A and B be countably infinite sets and assume that $A \cap B = \emptyset$. Prove that $A \cup B$ is countably infinite.

2. Proposition 9.18 of the text. You should assume Proposition 9.17. (In both propositions assume R is a commutative ring, not the real numbers as in the text.)