Math 215 – Fall 2017

Practice Homework 13 – Assigned October 30th, due November 1st

Note: Remember that you must show your work to get full credit for a problem.

1. Prove that
$$A \times (B \cap C) = (A \times B) \cap (A \times C).$$

2. Suppose that A and B are nonempty sets and $A \neq B$. Prove that $A \times B \neq B \times A$.

3. Prove that
$$A \times (B \backslash C) = (A \times B) \backslash (A \times C).$$