Math 430 Fall 2016 Homework #1

Due Sept. 13, Tue in class

1. Textbook, Section 3.2, page 88: 5(b-c), 6; (*Hint* to 6(b): use 6(a))
2. Textbook, Section 3.5, page 103: 5, 8(a-b);
3. Let A be an $m \times n$ matrix and B be an $n \times p$ matrix. Show that the conjugate of AB equals the product of $\overline{A}$ and $\overline{B}$, i.e., $\overline{A \cdot B} = \overline{A} \cdot \overline{B}$.
4. Let A and B be two symmetric matrices that commute. Show that the product AB is also symmetric.