Math 431 Homework 5
Due 10/23

1. Prove the second part of Proposition 3.3. That is, given $A * B * C$ and $A*C*D$, prove that $A*B*D$ (do not use the first part of the same proposition. Never mind! You may. But if you have the solution that does not use it, you'll get extra credit). Follow the book's suggestion by considering the line $\overleftrightarrow{EB}$. Is the converse of Proposition 3.3 true?

2. Prove Proposition 3.5. See Problem 3 in the exercises for one possible approach.

3. Prove Proposition 3.6. See Problem 4 in the exercises for one possible approach.