Homework Assignment # 3

Math 481
Kaul
Fall 2016
Due Monday, October 17

Instructions: To receive full credit, each solution must be neat and legible. Explain your reasoning fully and use complete sentences when appropriate – an answer without an explanation will receive no credit. Staple the homework sheet to the front of your work.

1. Fraleigh p. 68 # 56 (a)
2. Fraleigh p. 72 # 1
3. Fraleigh p. 72 # 2
4. Let $S$ and $T$ be subsets of a group $G$. Prove:
   (a) If $S \subseteq T$, then $\langle S \rangle \leq \langle T \rangle$.
   (b) $\langle S \cap T \rangle \leq \langle S \rangle \cap \langle T \rangle$.
5. Fraleigh p. 83 # 2
6. Fraleigh p. 83 # 8
7. Fraleigh p. 86 # 40
8. Fraleigh p. 86 # 42
9. Fraleigh p. 86 # 49
10. Fraleigh p. 87 # 52