



INTRO TO ABSTRACT MATH
FALL 2009

HOMework 11
DUE SEPTEMBER 30

Exercise 31. Let A , B and C be sets. Show that $A - (B \cup C) = (A - B) \cap (A - C)$.

Exercise 32. Let A and B be sets. Prove that if $A \subseteq B$ then $\mathcal{P}(A) \subseteq \mathcal{P}(B)$.

Exercise 33. Prove that for all $n \geq 0$, if A is a set with exactly n elements then $\mathcal{P}(A)$ has exactly 2^n elements.