

Assignment #6

Note that Monday 2/17 is a holiday.

Assignment due in lecture on Friday, Feb. 21:

To do but not hand in:

V-3, V-6;

W-1 (below).

To hand in:

V-1, V-2, V-11(b), V-12;

X-10.

Problem W-1. In a polarity with context (X, Y, ρ) , show that any closed set A in X is the intersection of “polars” of singletons: $A = \bigcap_{b \in B} \{b\}^\ell$ for some $B \subseteq Y$. Thus to find closed sets on one side it’s enough to start with the singletons on the opposite side.