

## EECS 270

### Homework #3

**Important:** For all problems, circle all prime implicants in your K-map, and identify which are essential. Also, show which PI are removed by eclipsing.

1. Find the minimal SOP for the functions listed in 4.13d and 4.13f. **(2)**
2. Find the minimal SOP for the functions listed in 4.16b and 4.16f. **(2)**
3. Find the minimal POS for the functions listed in 4.16b and 4.16f. Note whether the SOP or POS is smaller, in terms of their number of literals. **(2)**
4. Find the minimal SOP for the functions listed in 4.19d and 4.19e. **(3)**
5. Find the minimal POS for the functions listed in 4.19d and 4.19e. Note whether the SOP or the POS is smaller, in terms of their number of literals. **(3)**
6. Find the minimal SOP for the functions listed 4.72c and 4.72e. **(3)**