

# Assignment 11: Propositional Logic and Quine McCluskey

Ernesto Rodriguez

December 8, 2011

## 1 Part 1

1. Good Ol'  $x$
2. Good Ol'  $x * \bar{x}$

## 2 Part 2

1.  $(C \Rightarrow C) \Rightarrow C \Rightarrow (C \Rightarrow C) \text{ — (K with } [C \Rightarrow C \Rightarrow C/P], [C/Q])$
2.  $C \Rightarrow C \Rightarrow (C \Rightarrow C) \Rightarrow (C \Rightarrow C) \Rightarrow C \Rightarrow (C \Rightarrow C) \text{ — (S with } [C/P], [C/Q], [C \Rightarrow C/R])$
3.  $C \Rightarrow C \Rightarrow (C \Rightarrow C) \text{ — (MP \#1, \#2)}$
4.  $C \Rightarrow C \Rightarrow C \text{ — (K with } [C \Rightarrow C/P], [C/Q])$
5.  $(C \Rightarrow C) \Rightarrow (C \Rightarrow C) \Rightarrow (C \Rightarrow C) \text{ — (MP \#3, \#4)}$
6.  $(C \Rightarrow C) \Rightarrow (C \Rightarrow C) \Rightarrow (C \Rightarrow C) \text{ — (K with } [C \Rightarrow C/P], [C \Rightarrow C/Q])$
7.  $(C \Rightarrow C) \Rightarrow (C \Rightarrow C) \text{ — (MP \#5, \#6)}$