## Assignment \# 10.1 Sample

1. Recast the decision problem for the Boolean expression $(a+b)(a+\sim b+c)(\sim b)$ as a SubsetSum problem using the construction discussed in class.
$a$
b
c
$a+b+b \quad a+\sim b+c \quad \sim b+\sim b+\sim b$
$a$
$\sim a$
b
$\sim b$
c
${ }^{\sim} c$
C1
C1'
C2
C2'
C3
C3'
1
1
1
3
3
3

## Assignment \# 10.2,3 Sample

2. Recast the SubsetSum problem (8, 7, 6, 4, 6, 8, 2, 7, 2), $\mathrm{G}=19$ as a Partition Problem using the construction discussed in class.
3. Recast the decision problem for the Boolean expression $(a+b)(a+\sim b+c)(\sim b)$ as an Integer Linear Programming problem using the construction discussed in class.
