

Homework #3

1. Compute the following values:

a. $65AF$
 $+ \underline{12FB}_{\text{base16}}$

b. $65AF$
 $- \underline{12FB}_{\text{base16}}$

c. 576
 $+ \underline{557}_{\text{base8}}$

d. 576
 $- \underline{557}_{\text{base8}}$

2. Determine the effect of the following machine language program

```
. 0000 D1001D
. 0003 F10009
. 0006 C10017
. 0009 710019
. 000C A1001B
. 0012 510016
. 0015 00
. 0016 00
. 0017 0005
. 0019 0003
. 001B 0030
. 001D A1
```

3. Perform the following computations assuming a 13-bit, 2's complement binary representation:

a. 1101110101110
ADD 1110001101110

R =

C =

V =

b. 1F15
ADD 1D21

R =

C =

V =

c. 1001110101110
SUB 0111101101110

R =

C =

V =

d. 1A15
SUB 1F21

R =

C =

V =