CS 33 MIDTERM

I.

X   signed story
         ↓
100 |||||||||||||
  <-1   ∧∧ -1

         ∞

$\frac{1000}{1\,11}$ MAX-INT
    $\underline{011\,1111}$
       7F

-1 → 111\,1111\,111

         ∞

II.

$I = a/4$

$F = a^{\wedge}\Big($ 1000\,0000\,0000
    $\underline{0111\,1111\,111}$
    $(1111\,1111\,111)\Big)$

$\equiv (\sim a)$ (ones complement?)

B: a = 1101   1001
    b = 0100   0110
        1001   0100
        1011   1101 ⓐ
       [1001]

C: 8a - a·7a

H: a >> 31
    LMB
    100

    1111\,1111
    1111\,1110
    0000\,0001

    reg → 1

    $A_1 →$

D: 1010
w: 10100