Problem 1. (Data Representation) An eight bit computer stores these bytes:

$$A = 10100101, \quad B = 00110011, \quad \text{and} \quad C = 00000000.$$

The computer adds A to B and places the result in C.

(a) What bit sequence does C contain?

(b) Interpret A, B, and C as unsigned integers; what numbers do they represent?

(c) Interpret A, B, and C as signed integers; what numbers do they represent?

(d) Find the eight bit sequence which represents the negative of C.