1. Computer Number Systems

   Convert 246 from octal to hexadecimal

2. Computer Number Systems

   Solve for X_{16}

$$X_{16} = BA358_{16} + AE8BC_{16}$$

3. What Does This Program Do

   After the following program is run, what is the final value of C?

   10 C = 0: K = 0: S = 1
   20 IF S < 0 THEN C= C − 1 ELSE C = C + 1
   30 K = K + 1: S = − S
   40 IF K <> 8 THEN GOTO 20
   50 END

4. Recursive Functions

   Find f (6)

$$f(x) = \begin{cases} f(x-1) + x & \text{if } x \geq 4 \\ 2x & \text{otherwise} \end{cases}$$

5. Recursive Functions

   Find f (7,4)

$$f(x,y) = \begin{cases} x - y & \text{if } x \leq 0 \\ x - f(x-2, y-1) & \text{if } x > 0 \text{ and } x \text{ is even} \\ y - f(y-2, x-1) & \text{if } x > 0 \text{ and } x \text{ is odd} \end{cases}$$