

3. Given the following Haskell program,

```
secret [] a = a
secret b [] = b
secret (h:t) (f:r) | h < f = (h+f):(secret t r)
                  | otherwise = (h-f):(secret t r)
```

what is the value of the expression `secret [1,6,9,8] [7,2]` ? (10 pts)

Ans: [8, 4, 9, 8]

4. Given the following Scheme program,

```
(DEFINE (mystery a)
  (COND ((NULL? a) '(1 3))
        (else (CONS (+ (CAR a) 2) (mystery (CDR a))))))
```

what is the value of the expression `(mystery '(4 7 9))` ? (10 pts)

Ans: (6 9 11 1 3)