

280 Quiz 4/5/07 10 pts.

Name _____ TA _____

1. List three disadvantages of dispatching-on-type.

```
(define fact1
  (lambda (n)
    (if (= n 1)
        1
        (* n (fact1 (- n 1))))))
```

```
(define fact2
  (lambda (n product)
    (if (= n 1)
        product
        (fact2 (- n 1) (* product n)))))
```

2. Consider fact1 and fact2 above. Keeping in mind the examples from the big O sample sheet online, explain the differences between these two procedures in terms of time and space.