CS 3721: Programming Languages Lab
Lab #05: Lambda Calculus

The purpose of this recitation is to practice the reduction of lambda terms. For each of the given lambda terms, reduce it to normal form.

After you are done, submit your paper solution to the TA or save your solution to a text file and submit it online at

`www.cs.utsa.edu/~cs3723`

1. (λ x. λ y. x * y + 3) 7 1

2. λ x . λ y . (λ z . x y z) (y+1)

3. (λ x. λ y. y x x) 9 (λ x. λ y. x + y)

4. (λ x . λ y . λ z . x y z) (λ x . x) (λ y. y+1)

5. (λ x . λ y . (λ z . x y z) (y+1)) (λ x . λ*y*. x+y)

6. λ y. (λ x . λ y . λ z . x y z) (λ x . y x) (λ y. y+1) 3