# Prolog Homework 4, Part 2 

November 23, 2005

Deadline: Friday, December 9.

1. Compute $E \theta$, where

$$
E=f(x, f(x, b, y), g(a, z))
$$

and

$$
\theta=\{x \mapsto y, y \mapsto g(a, z), z \mapsto x\}
$$

2. Compute $\theta \sigma$, where

$$
\theta=\{x \mapsto f(x), y \mapsto z, z \mapsto g(a, y, h(x))\}
$$

and

$$
\sigma=\{x \mapsto y, z \mapsto y, y \mapsto h(y), w \mapsto a\}
$$

3. Compute $\theta \theta$, where

$$
\theta=\{x \mapsto f(x), y \mapsto z, z \mapsto g(a, y, h(x))\}
$$

