PHIL 112 Homework 3

Hardy Jones
999397426
Dr. Landry
Winter 2014

1. Explicate in terms of open and/or closed truth trees.
   (a) Quantificational validity
   (b) Quantificational equivalence
2. Use the tree method to show
   (a) quantificational truth
   (b) quantificational validity
   (c) quantificational equivalence
   (d) quantificational entailment

   (a) $[Fa \supset (\forall x)Fx] \supset [(\exists x)Fx \supset (\forall x)Fx]$

1	$[Fa \supset (\forall x)Fx] \supset [(\exists x)Fx \supset (\forall x)Fx]$	SM

   (b) $(\forall x)[Nx \supset (\exists y)Rxy]$, $\neg(\exists x)Rxx \wedge Na$ / $(\exists y)Ray$

   (c) $[(\forall x)Fx \supset Ga] \equiv (\exists x)(Fx \supset Ga)$

   (d) $\{(\forall x)[(\exists y)Hg(x,y) \supset Bg(x,x)], Ha, a = g(a,b)\} \vDash (\exists y)Bg(y,y)$
3. Why does the rule *Existential Decomposition* require that the instantiating constant **a** be foreign to all preceding lines of the branch?