

Worksheet Exercise 4.9.C.

Name _____

Deductions with Identities

Class _____ Date _____

Part C. Give deductions for these arguments.

- (#1) 1. $gFs \ \& \ gFh$
 2. $Ds \ \& \ \sim Dh$

Prem
 Prem $\therefore (\exists x)(\exists y)[gFx \ \& \ gFy \ \& \ \sim(x = y)]$

- (#2) 1. $(\forall x)(Hx \supset sFx) \ \& \ \sim sFg$
 2. $g = n$

Prem
 Prem $\therefore \sim Hn$

- (#3) 1. $(\forall x)[\sim(x = s) \supset \sim sAx] \ \& \ sAs$
 2. $sTs \ \& \ \sim sTg$

Prem
 Prem $\therefore \sim sAg$

- (#4) 1. $(\forall x)[\sim(x = s) \supset \sim hKx] \ \& \ hKs$
 2. $(\forall x)[\sim(x = h) \supset \sim sKx] \ \& \ sKh$
 3. $(\exists x)(Px \ \& \ hKx \ \& \ sKx)$
 4. Es

Prem
 Prem
 Prem
 Prem $\therefore Eh$

>> Continued on back side >>

