

**Worksheet Exercise 4.5.A.B.**

Name \_\_\_\_\_

Deductions with C.P. and I.P.

Class \_\_\_\_\_ Date \_\_\_\_\_

**Part A.** Use the rule I.P. to show that the following arguments are valid.

(#1)

1. $\sim(\exists x)Ux$	Prem
$\therefore \sim(\exists x)(Mx \ \& \ Ux)$	Concl

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(#2)

1. $(\exists x)Ux \vee (Ub \vee Uc)$	Prem
$\therefore (\exists x)Ux$	Concl

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(#3)

1. $(\forall x)(Ax \vee Bx)$	Prem
2. $(\forall x)(Cx \vee \sim Bx)$	Prem
$\therefore (\forall x)(Ax \vee Cx)$	Concl

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(#4)

1. $(\forall x)Ax \vee (\forall x)Bx$	Prem
$\therefore (\forall x)(Ax \vee Bx)$	Concl

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