Problem 7.3

Given no premises, use the Fitch system to prove $\forall x.(\neg\neg p(x) \Rightarrow p(x))$.

To apply a rule of inference, check the lines you wish to use as premises and click the button for the rule of inference. Reiteration allows you to repeat an earlier item. To delete one or more lines from a proof, check the desired lines and click Delete.

Whenever entering expressions, use Ascii characters only. Use ~ for ¬ ; use & for ∧; use | for ∨; use => for ⇒; use `A` for ∀; use `E` for ∃; and use : for . in quantified sentences. Also, for variables use strings of alphanumeric characters that begin with a capital letter. For example, to write the sentence $\forall x.\exists y.(p(x) \wedge q(y) \Rightarrow r(y) \wedge \neg s(y))$, write `AX:EY:(p(X)&q(Y)=>r(Y)|~s(Y)).`

Proof Editor

1.	~~p(X)	Assumption
2.	p(X)	Negation Elimination: 1
3.	~~p(X) => p(X)	Implication Introduction: 2
4.	AX:(~~p(X) => p(X))	Universal Introduction: 3
Goal	AX:(~~p(X) => p(X))	Complete Submit

Assumption | Negation Introduction | Implication Introduction | Universal Introduction
Reiteration | Negation Elimination | Implication Elimination | Universal Elimination
Delete | And Introduction | Biconditional Introduction | Existential Introduction
And Elimination | Biconditional Elimination | Existential Elimination
Or Introduction
Or Elimination

Reset | Show XML