

# CS161 - Quiz 5

Started: Mar 3 at 5:19pm

## Quiz Instructions

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### Question 1

1 pts

Any sentence in first-order logic can be expressed without the existential  $\exists$  quantifier

- ☒ True
- ☐ False

### Question 2

1 pts

Which of the following is equivalent to the sentence  $\forall x \exists y Likes(x, y)$ ?

- ☒  $\neg \exists x \forall y \neg Likes(x, y)$
- ☐  $\neg \exists x \neg \forall y Likes(x, y)$
- ☐  $\neg \forall x \exists y \neg Likes(x, y)$
- ☐  $\exists x \forall y Likes(x, y)$

### Question 3

1 pts

Modus Ponens (MP) is a sound inference rule

- ☒ True
- ☐ False

**Question 4****1 pts**

Resolving  $R(F(y)) \vee \neg G(y)$  with  $G(A) \vee S(w)$  gives

☐  $S(F(A)) \vee R(F(A))$

☒  $S(w) \vee R(F(A))$

☐ None of the others

☐  $S(y) \vee R(F(A))$

☐  $S(A) \vee R(F(A))$

Quiz saved at 5:21pm

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