CLASS: More on Quantified Statements

Due Jan 25 at 11:59pm   **Points** 5   **Questions** 5   **Time Limit** None
Allowed Attempts Unlimited

Instructions

Have your Math 22 notebook prepared to write the definition and the examples.

This is CLASS assignment is a continuation to the quantifies statements.

You have multiple attempts in answering the question

Truth and Falsity of Quantifies Statements ⤷ **(https://www.youtube.com/watch?v=WuV7meVTTKk)**

Take the Quiz Again

Attempt History

	Attempt	Time	Score
LATEST	**Attempt 1**	3 minutes	5 out of 5

⚠ Correct answers are hidden.

Score for this attempt: **5** out of 5
Submitted Jan 25 at 4:49pm
This attempt took 3 minutes.

Question 1	1 / 1 pts

Negation of Quantified Statements ⤷
**(https://www.youtube.com/watch?
v=jVNubvMSjoo&list=PLiwEbczHeZcuf7VyebtyKcVDqfViUkqfh&index=99)**

The logic of quantified statements Note.pdf
(https://deanza.instructure.com/courses/33250/files/10766771?wrap=1) ↓
(https://deanza.instructure.com/courses/33250/files/10766771/download?
download_frd=1)

Now answer the following question:

What is the negation of a universal statement?

○ Conditional statement

○ Universal statement

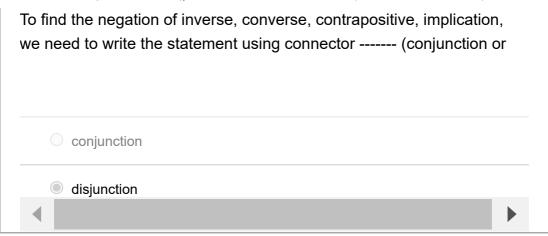◉ Existential statement

○ Biconditional Statement

Question 2   1 / 1 pts

Negation of Quantified Statements ↪
(https://www.youtube.com/watch?
v=jVNubvMSjoo&list=PLiwEbczHeZcuf7VyebtyKcVDqfViUkqfh&index=99)

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download_frd=1)

Now answer the following question:

What is the negation of "If P then Q"?

○ Not P then not Q
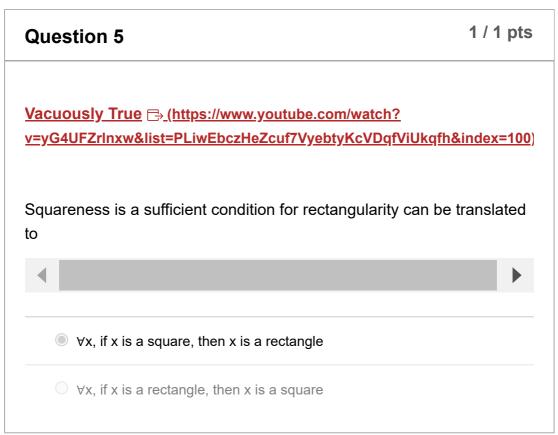
○ Not P then Q

○ Not P or Q

○ P and not Q

Question 3   1 / 1 pts

Vacuously True ⤷ **(https://www.youtube.com/watch?**
v=yG4UFZrlnxw&list=PLiwEbczHeZcuf7VyebtyKcVDqfViUkqfh&index=100)

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(https://deanza.instructure.com/courses/33250/files/10766771/download?
download_frd=1)

Now answer the following question:

In general, a statement of the form

$$\forall x \text{ in } D, \text{ if } P(x) \text{ then } Q(x)$$

is called **vacuously true** or **true by default** if, and only if, $P(x)$ is false for every x in D.

Which statement is vacuously true?

◀ [   ] ▶

○ If p(x) is false for some x in the domain

◉ If p(x) is false for all x in the domain

○ If p(x) is true for all x in the domain

Question 4   1 / 1 pts

Vacuously True ⤷ **(https://www.youtube.com/watch?**
v=yG4UFZrlnxw&list=PLiwEbczHeZcuf7VyebtyKcVDqfViUkqfh&index=100)

To find the negation of inverse, converse, contrapositive, implication, we need to write the statement using connector ------- (conjunction or

---

○ conjunction

◉ disjunction

◀   ▶

Question 5   1 / 1 pts

Vacuously True ▭ **(https://www.youtube.com/watch?**
v=yG4UFZrInxw&list=PLiwEbczHeZcuf7VyebtyKcVDqfViUkqfh&index=100)

Squareness is a sufficient condition for rectangularity can be translated to

◀   ▶

◉ ∀x, if x is a square, then x is a rectangle

○ ∀x, if x is a rectangle, then x is a square

Quiz Score: **5** out of 5