

LEMOYNE-OWEN COLLEGE
DIVISION OF NATURAL SCIENCES, MATHEMATICS AND COMPUTER SCIENCE

MATH 120
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Quiz 3

Show your work

Name: _____

Write a **negation** for each of the following statements:

1. All boats are unsinkable.

2. At least one cat loves catnip.

3. He is tall or he is not handsome.

Let p represent the statement “**it is hot,**” and let q represent the statement “**it is dry.**”
Translate each *symbolic* compound statement into *words*.

4. $p \vee q$

5. $\sim p \wedge q$

Let p represent the statement “**he wins the contest,**” and let q represent the statement “**he visits Tampa.**” Write each of the following in symbols.

6. He does not win the contest or he does not visit Tampa. _____

7. He visits Tampa and he wins the contest. _____

Decide whether the following compound statements are *true* or *false*:

8. $7+1=10 \wedge 8>10$ _____

9. $6-2=4 \vee 3-1=2$ _____

10. Construct a **truth table** for $(\sim p \vee q) \wedge \sim q$

