

LEMOYNE-OWEN COLLEGE  
DIVISION OF NATURAL AND MATHEMATICAL SCIENCES

COSI240  
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Assignment 2

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  $(\sim p \vee q) \wedge \sim q$
