Name: _____   Date: _____

QUIZ – LOGIC

1. (42%) Given the logic propositions:

    p: Alex loves to surf

    q: There is a lot of wind

    r: There are big waves

Write in words:

a. $q \wedge p$ _____

b. $q \vee \neg p$ _____

c. $q \underline{\vee} p$ _____

d. $r \Rightarrow p$ _____

Write in symbolic form:

e. Alex does not like to surf: _____

f. There is a lot of wind or there are not big waves: _____

g. If there is a lot of wind then Alex loves to surf _____

2. (30%) Given the logic propositions:

    p: Alex loves to surf

    r: There are big waves

Write in words the contrapositive, converse and inverse of $r \Rightarrow p$:

a. Contrapositive:_____

b. converse:_____

c. inverse:_____

3. (28% - 4% for every correct row) Fill the truth table:

p	q	r	$\neg r$	$p \Rightarrow \neg r$	$(\neg p \vee r) \wedge q$