

Question:	1	2	Total
Points:	4	6	10
Score:			

1. (4 points) Consider the following atomic propositions:

- p = "You did the homework."
- q = "You studied for the exam."
- r = "You passed the course."

Express each of the following compound propositions as an English sentence:

a. $p \wedge q$

b. $q \longrightarrow r$

c. $(\neg p \vee \neg q) \longrightarrow \neg r$

d. Briefly describe a scenario in which the conditional $q \longrightarrow r$ would be *false*.

2. (6 points) Fill in the truth table for the compound proposition: $(\neg p \vee \neg q) \longrightarrow \neg r$:

p	q	r	$\neg p$	$\neg q$	$\neg p \vee \neg q$	$\neg r$	$(\neg p \vee \neg q) \longrightarrow \neg r$
T	T	T					
T	T	F					
T	F	T					
T	F	F					
F	T	T					
F	T	F					
F	F	T					
F	F	F					