1. Construct a truth table for (~p V ~q) → p

2) Construct a truth table for ~q → (p ^ q)

1. Given p is true, q is true, and r is false, find the truth value of the statement ~p → (~q V r).

Show step by step work.

1. If the argument below is valid, name which of the four valid forms of argument is represented. If it is not valid, name the fallacy that is represented.

If I catch the bus on time, then I am not late to work.

If I am not late to work, then I will get a raise.

Therefore, if I catch the bus on time, then I will get a raise.

5) Given A = {1, 3, 5, 7}, B = {2, 3, 5}, and C = {3, 4, 5, 6}. Evaluate each set

a) A ∩ B

b) A U C

c) B U C

d) (A U B) ∩ C

e) A U (B U C)

f) (A ∩ B) ∩ C

g) (A ∩ B) U C