Math 104 - Quiz 8 Name_____

1. Suppose $Pr(E) = 0.8$, $Pr(F) = 0.2$, $Pr(G) = 0.4$, $Pr(E \cap F) = 0.16$, $Pr(F \cap G) = 0.4$.

a. (1 pt.) Are E, F independent events?

b. (1 pt.) Are F, G independent events?

2. Suppose E, F are independent events and $Pr(E) = 0.5$, $Pr(F) = 0.3$.

a. (1 pt.) $Pr(E|F) =$

b. (1 pt.) $Pr(E \cap F) =$

3. Consider the following tree diagram:

Use this diagram to answer the following questions:

a. (1 pt.) $Pr(B) =$

b. (1 pt.) $Pr(B') =$

c. (1 pt.) $Pr(C|B) =$

d. (1 pt.) $Pr(B \cap C) =$

e. (1 pt.) $Pr(C) =$

f. (1 pt.) $Pr(B|C) =$