MATH 10B with Prof. Stankova Section #209; time: 3:30-5pm

GSI: Ninh DO

Quiz 6

Student: SID:

Tue 3/5/19

True/False - No explanation needed. (1pt for correct, 0pt - no answer, -1pt - incorrect)

1. It is sufficient to conclude that the event A is independent from the event B if P(B) = P(B|A). True/False

2. The fact P(A|B)=0 is a special case implying that the event A is independent from the event B. True/False

## Problems - Need justification. No justification means zero!

1. (10pts) Suppose a weatherman predicts rainy days correctly with an accuracy of 80% and predicts clear days correctly with an accuracy of 70%. Given that it rains 10% of the time, and the weatherman predicted that it will not rain tomorrow, what is the probability that it will actually not rain tomorrow?