

MATH 10B, SPRING 2017, QUIZ 6

- (1) Suppose you are playing a game where someone rolls two fair 6-sided dice. If both rolls are ones, you win a million dollars.
- (a) If you are told that the first roll is a one, what is the chance that you will win?

 - (b) If you are told that at least one of the rolls is a one, what is the chance that you will win?
- (2) Suppose that you roll two fair 6-sided dice. Let A be the event that both rolls are the same. Let B be the event that at least one of the rolls is a one. Are A and B independent? Use the definition of independence to justify your answer.