

## Quiz 6 (8 POINTS TOTAL)

MATH 017, SPRING 2016

NAME:

SECTION:

**Problem 1** Two fair dice are rolled. What is the probability that two sixes are rolled or the sum of the two dice is 11?

(a)  $\frac{1}{36}$

(b)  $\frac{1}{18}$

(c)  $\frac{1}{12}$

(d)  $\frac{1}{9}$

**Problem 2** Two cards are drawn from a standard deck **without** replacement. What is the probability that the first is red and the second is black?

(a)  $\frac{1}{2}$

(b)  $\frac{13}{51}$

(c)  $\frac{1}{4}$

(d)  $\frac{27}{51}$

**Problem 3** Suppose two events  $E$  and  $F$  are independent. Which one of the following is not always true?

- (a)  $P(F|E) = P(F)$
- (b)  $P(E \cap F) = P(E) \cdot P(F)$
- (c)  $P(E \cap F) = 0$
- (d)  $P(E') = 1 - P(E)$

**Problem 4** Two fair dice are rolled. What is the probability that the total is 11 given that at least one of the dice rolls a 5?

- (a)  $\frac{1}{6}$
- (b)  $\frac{2}{11}$
- (c)  $\frac{1}{3}$
- (d)  $\frac{2}{13}$

**Feedback:**

1. Any comments (on lectures, homework, quizzes, course, me, etc.)?