

MATH 1473: Quiz #8*Sections 3.3, 3.4, 3.6*

Problem 1: A card is dealt from a complete deck of 52 playing cards (no jokers). Use probability rules to find the probability that the card is a ten or a spade.

- a. $1/52$
- b. $4/13$
- c. $51/52$
- d. $9/13$
- e. None of these.

Problem 2: If $P(E) = \frac{2}{7}$, find $o(E')$.

- a. 2:5
- b. 5:2
- c. 2:7
- d. 7:2
- e. None of these.

Problem 3: A pair of 6-sided dice are rolled. Find the probability that the sum equals 7 or 11.

- a. 0
- b. $2/36$
- c. $2/9$
- d. $7/9$
- e. None of these.

Problem 4: Your order 12 burritos to go from your favorite restaurant, Taco Mayo. Five of the burritos have hot peppers and seven of them do not. Unfortunately, the restaurant forgot to label them. If you pick three burritos at random, find the probability that all of them have hot peppers.

- a. .117
- b. .045
- c. .072
- d. .035
- e. None of these.

Problem 5: Find the probability of being dealt five cards of the same suit when playing five-card poker.

- a. .096154
- b. .006435
- c. .000495
- d. .001981
- e. None of these.

Problem 6: Two-hundred people apply for two jobs. Sixty of the applicants are women. If two people are selected at random, what is the probability that both are men?

- a. .42
- b. .09
- c. .49
- d. .70
- e. None of these.

Problem 7: Cards are dealt from a full deck of 52 playing cards (no jokers). Find the probability that the second card is an ace, given that the first card was a jack.

- a. $1/13$
- b. $4/663$
- c. $4/51$
- d. $4/52$
- e. None of these.

Problem 8: A single six-sided die is rolled. Find the probability of rolling a six, given that the number rolled is even.

- a. 0
- b. $1/2$
- c. $1/3$
- d. $1/6$
- e. None of these.

