

TEST 2

PROBABILITY AND STATISTICS

11.04.2017

1. From a pack of 52 cards, two cards are drawn together at random. What is the probability of both the cards being kings?

A. $1/15$

B. $25/57$

C. $35/256$

D. $1/221$

2. In a playoff series, the probability that Team A wins over Team B is $\frac{3}{5}$ and the probability that Team C wins over Team D is $\frac{4}{7}$. If the events are independent, the probability that Team A wins and Team C loses is:

A. $\frac{9}{35}$

B. $\frac{12}{35}$

C. $\frac{7}{12}$

D. $\frac{1}{3}$

3. Three unbiased coins are tossed. What is the probability of getting **at most** one head?

A. $1/4$

B. $1/2$

C. $3/8$

D. $7/8$

4. A 5 digit PIN number can begin with any digit (except zero) and the remaining digits have no restriction. If repeated digits are allowed, the probability of the PIN code beginning with a 7 and ending with an 8 is:

A. $1/10$

B. $2/5$

C. $1/100$

D. $1/90$

5. Probability that a randomly chosen point of a square of size $a=10$ cm will be found inside a circle inscribed in this square is:

A) $\pi/4$

B) $1-\pi/4$

C) $1- 3\pi/4$

D) $1/100$