

Course outline

How does an NPTEL online course work?

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

 Hardness vs Randomness.

 Hardness to NW-Generator to PRG

 Quiz : Assignment 9

 Assignment 9 Solution

 Feedback for Week 9

Week 10

Week 11

Week 12

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Assignment 9

The due date for submitting this assignment has passed.

Due on 2021-03-24, 23:59 IST.

As per our records you have not submitted this assignment.

- 1) If there exists a Boolean function $f \in E$ such that $H_{\text{avg}} \geq 2^{\epsilon \cdot n}$ for some $\epsilon > 0$. Then which of the following statement holds true?

1 point

- MA=NP.
 AM=NP.
 MA=P.
 P=NP.

No, the answer is incorrect.
Score: 0

Accepted Answers:
MA=NP.

- 2) Suppose we are repeatedly tossing a fair coin, and S_n be the number of heads in first n tosses. For some $0 \leq \delta \leq 1$, let $\Pr(|S_n - n/2| \geq \delta(n/2)) = Q$. Which of the following options is correct with respect to Q?

1 point

- $Q \geq 2 \cdot e^{-(n/2) \cdot (\delta^2/4)}$
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 $Q \leq 2 \cdot e^{(n/2) \cdot (\delta^2/4)}$.

No, the answer is incorrect.
Score: 0

Accepted Answers:

$Q \leq 2 \cdot e^{-(n/2) \cdot (\delta^2/4)}$

- 3) For a non-negative random variable X, and $a > 0$. What is the probability of $X \geq a$?

1 point

- 0
 $O(1/a)$
 $O(1-1/a)$.
 1

No, the answer is incorrect.
Score: 0

Accepted Answers:
 $O(1/a)$