cse.iitb.ac.in/course_vm/cs433/answer/25669/

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## CS433 Q 1: Consider CNF formula $(\neg p1 \lor p2) \land (\neg p1 \lor p3 \lor p5) \land (\neg p2 \lor p4) \land (\neg p3 \lor \neg p4) \land (p1 \lor p5 \lor \neg p2) \land (p2 \lor p3) \land (p2 \lor \neg p3 \lor p7) \land (p6 \lor \neg p5)$. Which of the following holds in a RUN of DPLL after only decision p2 = 0?
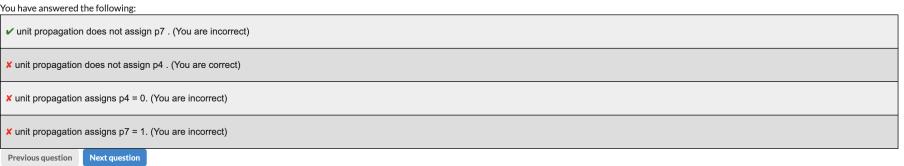
- [ ] unit propagation does not assign p7 .

- [ ] unit propagation does not assign p4 .

- [ ] unit propagation assigns p4 = 0.

- [ ] unit propagation assigns p7 = 1.

**Answer**

Note: please be careful before submitting the answer. You will not be able to change the answers.

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# CS433 Q 1: Consider CNF formula (¬p1 ∨ p2 ) ∧ (¬p1 ∨ p3 ∨ p5 ) ∧ (¬p2 ∨ p4 ) ∧ (¬p3 ∨ ¬p4 ) ∧ (p1 ∨ p5 ∨ ¬p2 ) ∧ (p2 ∨ p3 ) ∧ (p2 ∨ ¬p3 ∨ p7 ) ∧ (p6 ∨ ¬p5 ). Which of the following holds in a RUN of DPLL after only decision p2 = 0?

You have answered the following:

| |
|---|
| ✔ unit propagation does not assign p7 . (You are incorrect) |
| ✘ unit propagation does not assign p4 . (You are correct) |
| ✘ unit propagation assigns p4 = 0. (You are incorrect) |
| ✘ unit propagation assigns p7 = 1. (You are incorrect) |

Previous question    Next question

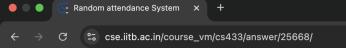Please click on home if your are viewing old quiz!

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## CS433 Q 2: Which of the following hold under partial assignment $\{p1 \rightarrow 0, p2 \rightarrow 1, p3 \rightarrow 0\}$?

☐ ($\neg$p2 $\vee$ p1) is true

☐ (p4 $\vee$ p2) is true

☐ ($\neg$p4 $\vee$ $\neg$p1) is true

☐ (p1 $\vee$ p5 $\vee$ p4) is a unit clause

## Answer

**Note: please be careful before submitting the answer. You will not be able to change the answers.**
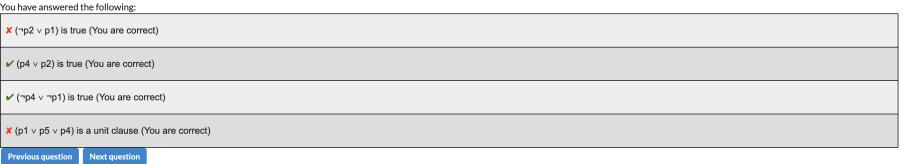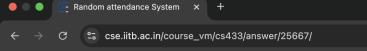
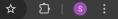Please click on home if your are viewing old quiz!

# CS433 Q 2: Which of the following hold under partial assignment $\{p1 \rightarrow 0, p2 \rightarrow 1, p3 \rightarrow 0\}$?

You have answered the following:

✘ ($\neg p2 \lor p1$) is true (You are correct)

✔ ($p4 \lor p2$) is true (You are correct)

✔ ($\neg p4 \lor \neg p1$) is true (You are correct)

✘ ($p1 \lor p5 \lor p4$) is a unit clause (You are correct)

[Previous question] [Next question]

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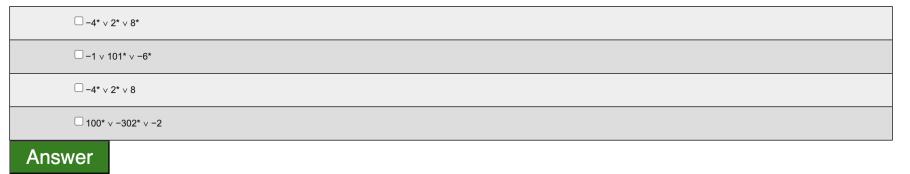
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## CS433 Q 3: Under assignment [−4, 2, −1, 6, 100, −302], which of the following clauses have correct state of 2-watched literals? (* indicates the watched literal.)

- ☐ −4* ∨ 2* ∨ 8*
- ☐ −1 ∨ 101* ∨ −6*
- ☐ −4* ∨ 2* ∨ 8
- ☐ 100* ∨ −302* ∨ −2

## Answer

Note: please be careful before submitting the answer. You will not be able to change the answers.

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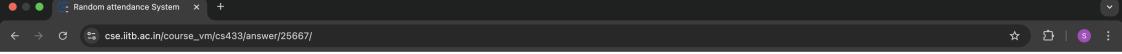# RollNo. 23B0912 Home Logout

## CS433 Q 3: Under assignment [−4, 2, −1, 6, 100, −302], which of the following clauses have correct state of 2-watched literals? (* indicates the watched literal.)
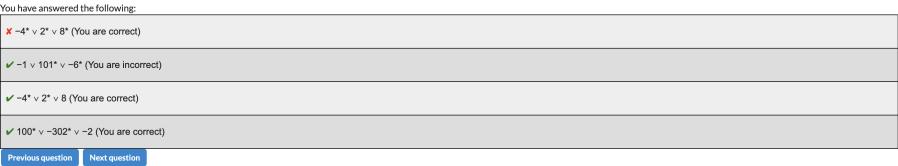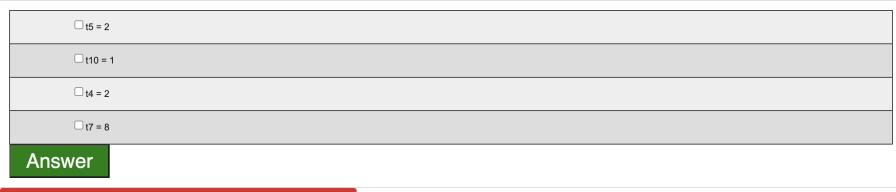
You have answered the following:

| |
|---|
| ✗ −4* ∨ 2* ∨ 8* (You are correct) |
| ✔ −1 ∨ 101* ∨ −6* (You are incorrect) |
| ✔ −4* ∨ 2* ∨ 8 (You are correct) |
| ✔ 100* ∨ −302* ∨ −2 (You are correct) |

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## CS433 Q 4: Which of the following are correct ti of Luby restart sequence?

- ☐ t5 = 2
- ☐ t10 = 1
- ☐ t4 = 2
- ☐ t7 = 8

**Answer**

**Note: please be careful before submitting the answer. You will not be able to change the answers.**

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# CS433 Q 4: Which of the following are correct ti of Luby restart sequence?

You have answered the following:

| |
|---|
| ✔ t5 = 2 (You are incorrect) |
| ✔ t10 = 1 (You are incorrect) |
| ✗ t4 = 2 (You are correct) |
| ✔ t7 = 8 (You are incorrect) |

Previous question   Next question

Please click on home if your are viewing old quiz!