3.10 Week 3 Homework Quiz

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Attempt 10

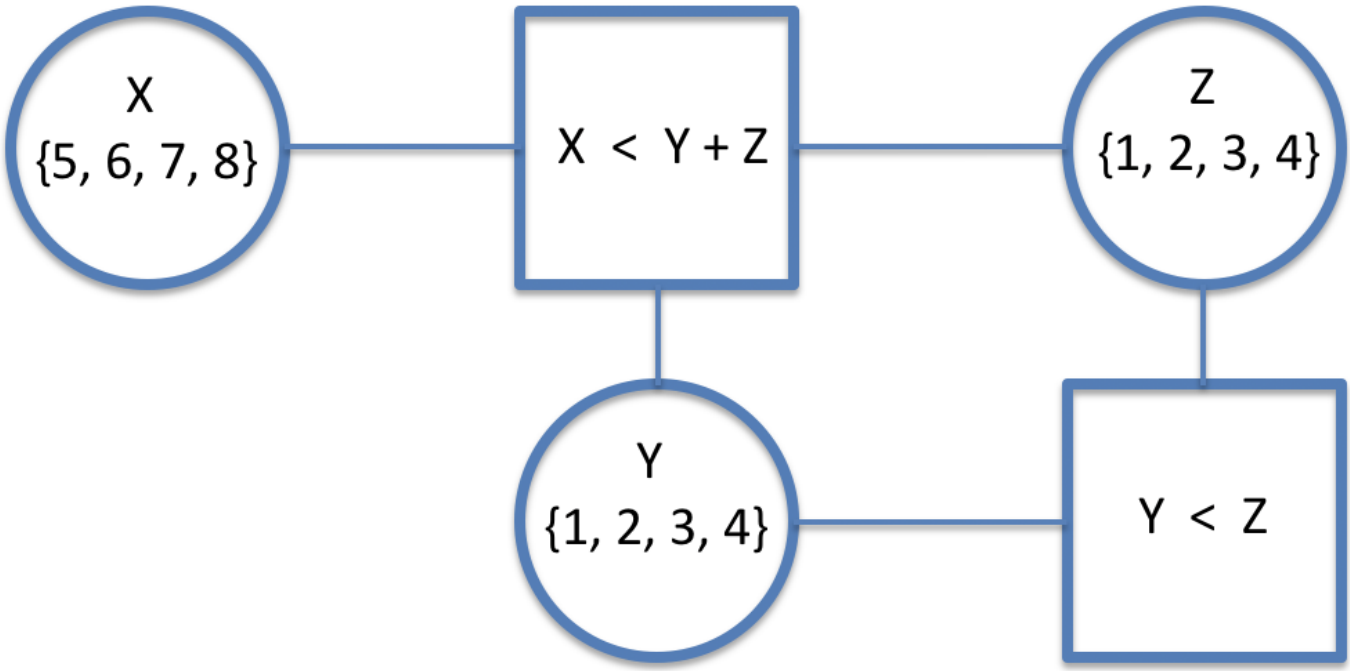
Written: Jan 27, 2023 5:27 PM - Jan 27, 2023 5:28 PM

Submission View

Your quiz has been submitted successfully.

Question 1 **3 / 3 points**

Consider the following constraint network over three variables – X, Y, Z – with initial domains as indicated:

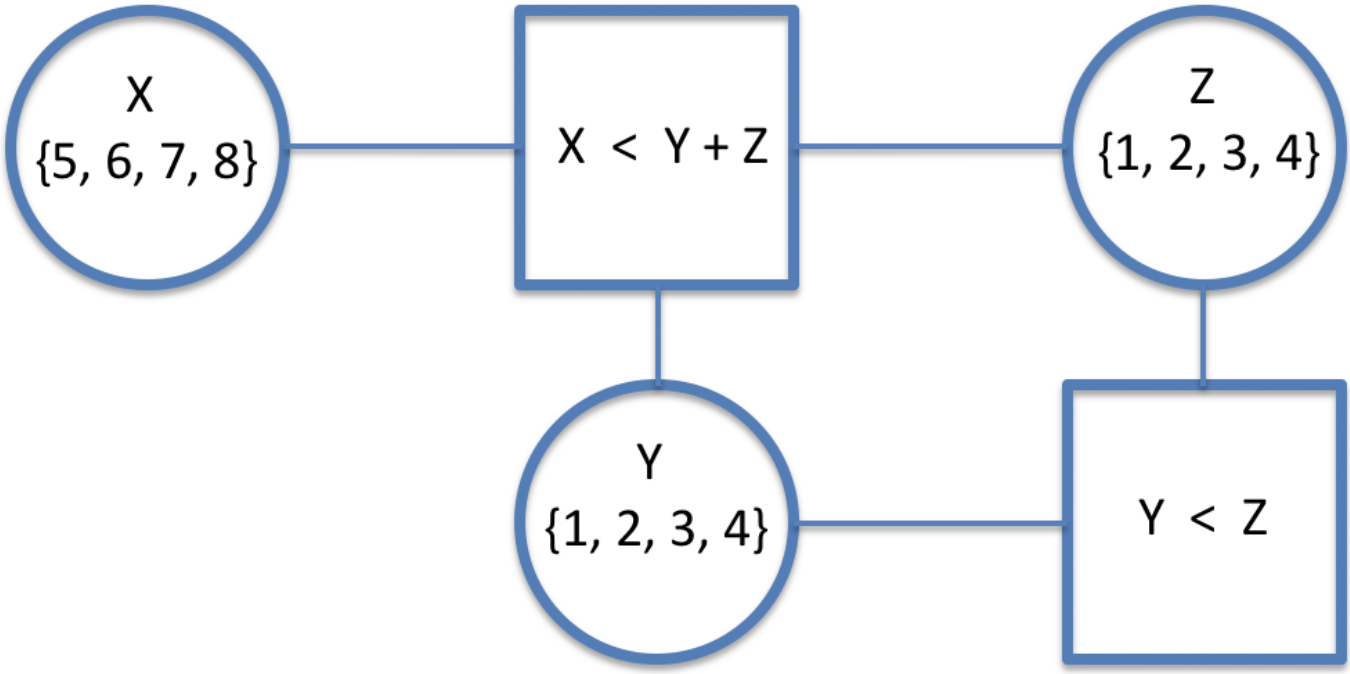


Check all elements of the domain for **X** after applying the Generalized Arc Consistency (GAC) algorithm to the constraint satisfaction graph.

- [ ] 5
- [ ] 6
- [ ] 7
- [ ] 8

Question 2 **3 / 3 points**

Consider the following constraint network over three variables – X, Y, Z – with initial domains as indicated:

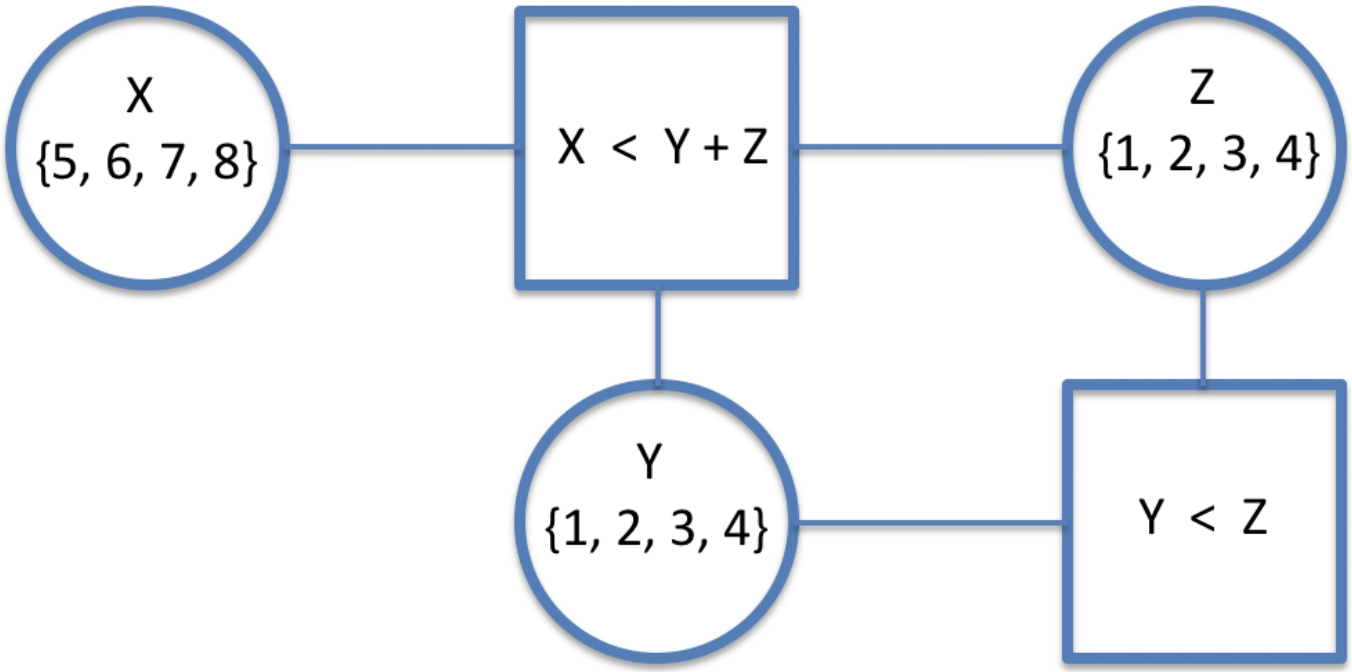


Check all elements of the domain for **Y** after applying the Generalized Arc Consistency (GAC) algorithm to the constraint satisfaction graph.

- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4

Question 3 **3 / 3 points**

Consider the following constraint network over three variables – X, Y, Z – with initial domains as indicated:

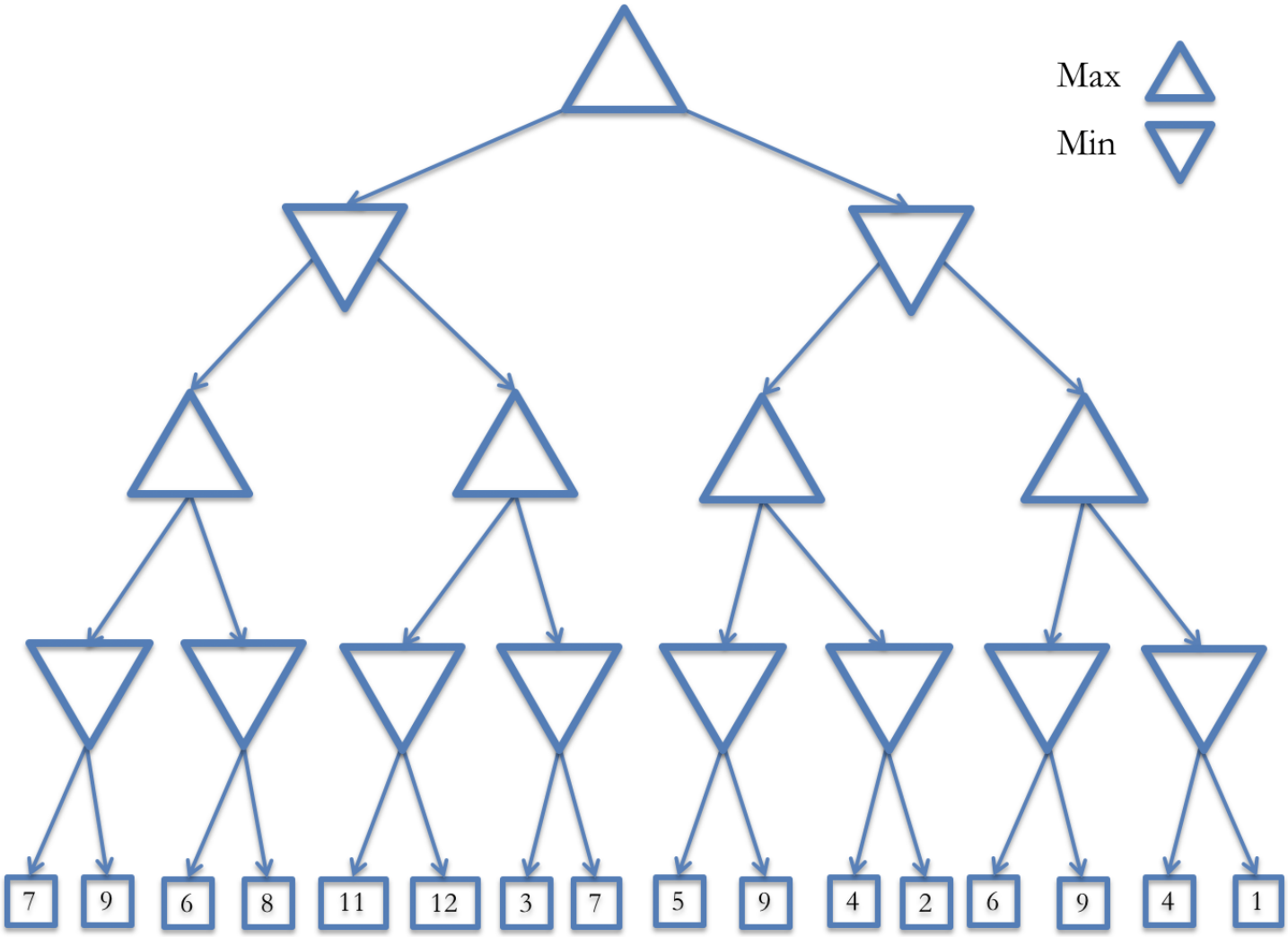


Check all elements of the domain for **Z** after applying the Generalized Arc Consistency (GAC) algorithm to the constraint satisfaction graph.

- [ ] 1
- [ ] 2
- [ ] 3
- [ ] 4

Question 4 **5 / 5 points**

Consider the following game tree. Give the value for the root node obtained through minimax search.


Max
Min
7
9
6
8
11
12
3
7
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9
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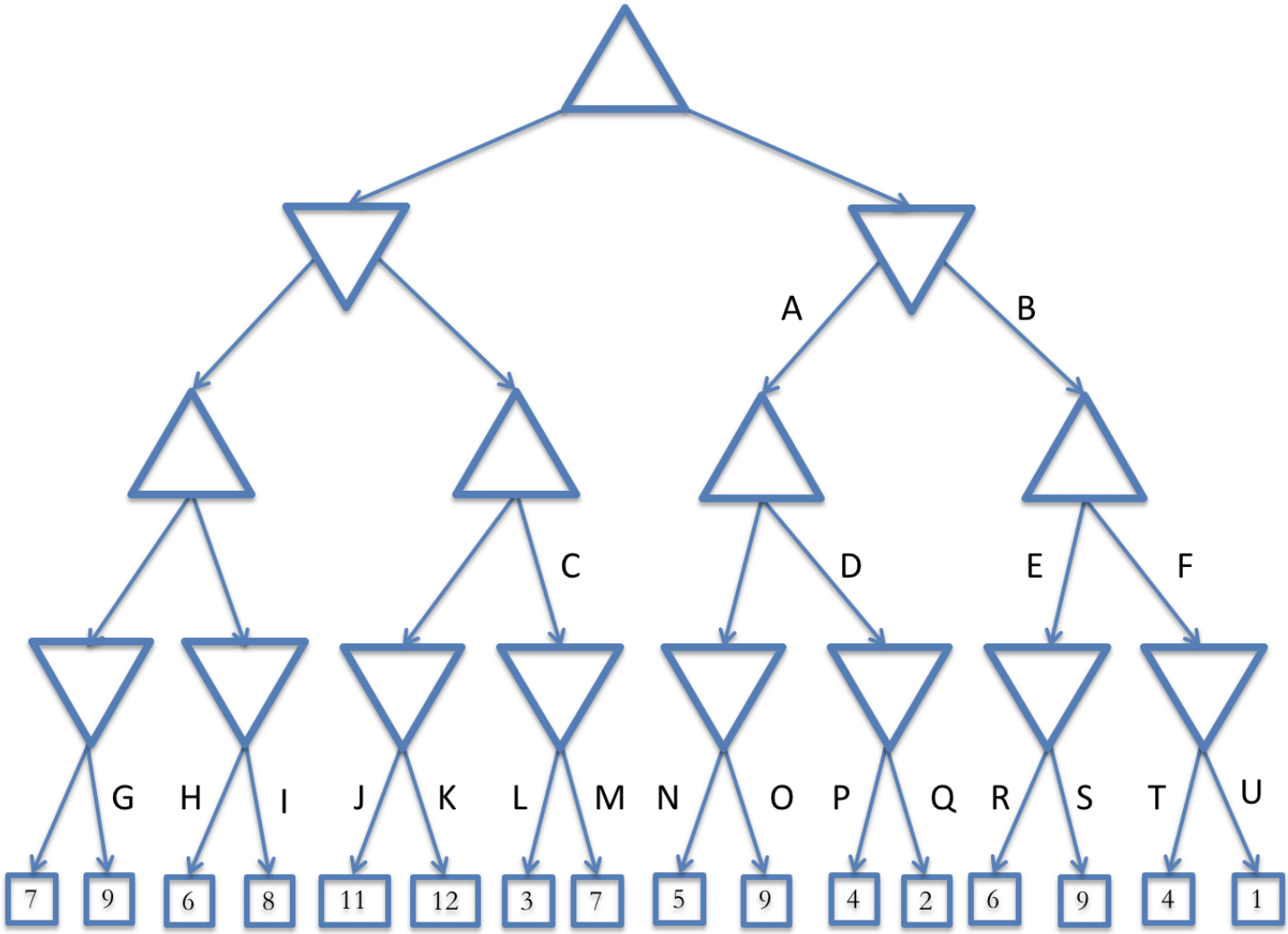
2
6
9
4
1

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10
- ○ 11
- ○ 12

Question 5 **10 / 10 points**

Consider the following game tree. Identify all arcs that are pruned during ***minimax search with alpha-beta pruning***. If an arc into a node would be pruned then ***do not*** (redundantly) select the arcs in that node's subtree as well.


A
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- [ ] A
- [ ] B
- [ ] C
- [ ] D
- [ ] E
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- [ ] L
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- [ ] N
- [ ] O
- [ ] P
- [ ] Q
- [ ] R
- [ ] S
- [ ] T
- [ ] U

Attempt Score: 100 %

Overall Grade (last attempt): 87.42 %

Done