

# APSU Math Problem of the Week

## Problem #10: The Return of Naked Sudoku

**Submission Deadline:** 11/19/2021 by 12pm to  
**Dr. Brad Fox** in MMCS 109 or by email to [foxb@apsu.edu](mailto:foxb@apsu.edu)

This will be the final Math Problem of the Week for semester with the upcoming holidays and final exams, and since it is a challenging one, you have some extra days to complete it. The prize for this week is a \$10 Chick-Fil-A gift card.

In this Naked Sudoku puzzle (meaning no numbers are given to you initially), follow the normal sudoku rules of placing a 1 through 9 in every row, column, and  $3 \times 3$  block. The only clues you are provided are the less than or greater than relationship between all adjacent squares within the blocks.

2 < 7 > 3	4 > 1 < 6	8 < 9 > 5
5 < 8 > 4	3 < 9 > 7	2 < 6 > 1
6 > 1 < 9	2 < 8 > 5	3 < 4 < 7
7 < 9 > 5	6 > 4 < 8	1 < 2 < 3
3 > 2 < 6	5 < 7 > 1	9 > 8 > 4
8 > 4 > 1	9 > 2 < 3	7 > 5 < 6
9 > 3 < 8	1 < 5 > 4	6 < 7 > 2
4 < 6 < 7	8 > 3 > 2	5 > 1 < 9
1 < 5 > 2	7 > 6 < 9	4 > 3 < 8

Feel free to take this printout, or find each Problem of the Week by scanning this:

Complete the problem each week for a chance to win a prize



### Rules:

1. Any APSU student can submit a solution individually, or work can be done in a small group of 2 or 3 students.
2. Solutions must be justified when appropriate to be considered correct.
3. Submissions can be made to Dr. Brad Fox (MMCS 109) or electronically to [foxb@apsu.edu](mailto:foxb@apsu.edu)
4. Problems will be posted each Friday afternoon with submissions due by the following Friday at 12pm. Solutions and the weekly winner will be posted once the deadline has passed.
5. One correct submission (whether submitted individually or as a group) will be randomly chosen to win a prize such as gift cards, Galois Math Club t-shirts, and APSU CoSTEM swag, in addition to receiving the glory of having their success published on this webpage.
6. Faculty and other non-students can submit solutions, but are not eligible for prizes.