

Name: \_\_\_\_\_

Email: \_\_\_\_\_

**Math Club: Biweekly Contest Week Three**

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**Release Date:** September 27, 2023

**Instructions:** Solve the following problem as best you can. The first student to submit the correct solution via email to tamumathcontest@gmail.com or to Jeremy Kubiak in Blocker 336D (with time stamp) wins!

**Problem 1.** Let  $a, b, c, d, e$  be a permutation of the set  $\{1, 2, 3, 4, 5\}$  (without repetition).

Find the number of permutations such that  $a < b > c < d > e$  or  $a > b < c > d < e$ .