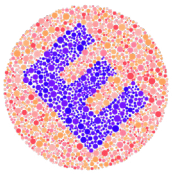

Estimathon

HOW TO PLAY

Overview

Your team will have **30 minutes** to work on **13** estimation problems. The answer to each problem is a positive number. Your team will submit **intervals** for each problem. Intervals may not contain negative numbers or zero.

Scoring

An interval is **good** if it contains the correct answer. After the 30 minutes is over, the final score for your team will be:

$$\left(10 + \sum_{\text{good intervals}} \left\lfloor \frac{\max}{\min} \right\rfloor\right) \cdot 2^{13-(\#\text{ of good intervals})}$$

That is, for every problem you get wrong (or leave blank), your score doubles.

The winning team is the team with the **LOWEST SCORE**.

Submitting intervals

Every team can submit up to **18 total intervals**. Your team will receive an answer sheet containing 18 slips. Use these to submit your intervals **at any time** throughout the contest. Each slip must contain your **team name**, **problem number**, and **interval** (min and max value).

You can bring slips up at any time during the 30 minutes; I will attempt to grade entries in real time[1].

Re-submitting

Since you have up to 18 submissions for 13 problems, you may submit intervals for a given problem more than once. Only the last submission for any given problem is the one that will count towards your final score.

Notation

You may use scientific notation if you like, but nothing more complicated than that. E.g., the interval $[3 \cdot 10^6, 10^7]$ is fine, but $[3^7, 4^8]$ is not.

1 Though you should not count on getting quick scoring feedback towards the end of the 30 minutes, as it may be busy.