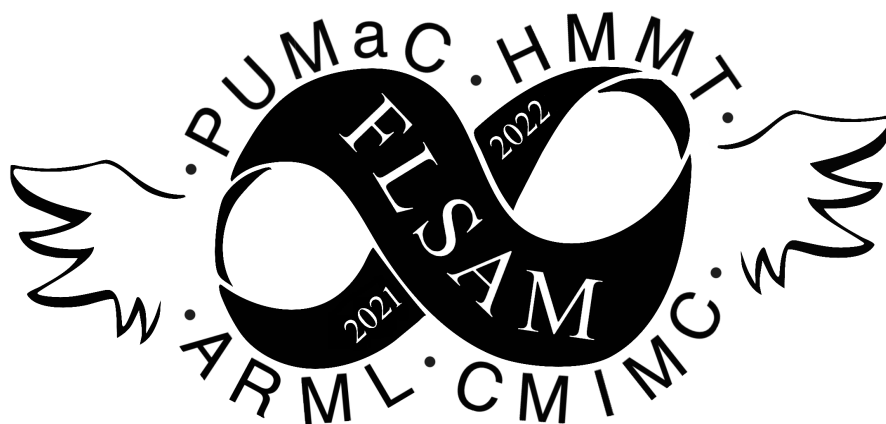


Florida Student Association of Mathematics



2022 ARML Tryout

Set 1 of 7

Welcome to the **2022 FLSAM ARML Tryout!** The tryout will consist of **7 sets** of **2 problems each**. You will have **10 minutes** to work on each set. Write your name and answers directly on each problem set. Scoring is based on the number of correct answers; there is no penalty for wrong answers. Good luck!

Round 1

Name: _____

1. _____

2. _____

1. Alex is reading the book *1984*, which has 328 pages, which are numbered $1 - 328$. He reads a consecutive set of pages such that the sum of the page numbers on the pages he reads equals 1984. Find the page number he started on.
2. In a circle, there exist 4 distinct chords of length 8 such that the chords enclose a square with area 36. The area of the circle can be expressed as $a\pi$, where a is a positive integer. Compute a .