

# Math Race

An original puzzle game by Josh Burdick and Yona Voss-Andreae

## Concept:

Math race is designed to be a mobile first, puzzle game experience. The core of the game is simple, players that participate in a race go head to head at attempting to solve increasingly difficult math equations. Problems range from 1st grade difficulty, and cap out at the single-variable calculus level. Each race will be unique, as an algorithm will procedurally generate never seen before questions for each round. Players will give their answer in a Kahoot style manner, the first player to answer every question wins.

## Features:

- Multiplayer experience that enables different devices to connect to the same game session.
- Sidebar in GUI showing how far competitors are in the race.
- Single player practice mode that allows users to hone their skills.
- Global leaderboard that ranks players based on points they earn from winning races and practicing in single player.
- Professional grade user interface.
- User authentication.

## Potential Features:

- Profile menu that displays achievements, date of account creation, games played, and other statistics.
- Up to 10 players in race
- In-game chat

## Technologies:

- Vue.js for frontend
- Node.js for backend
- HTML for layout
- CSS / CSS Bootstrap for styling

- Express for routing
- Postman for API testing
- MongoDB / Mongoose for database