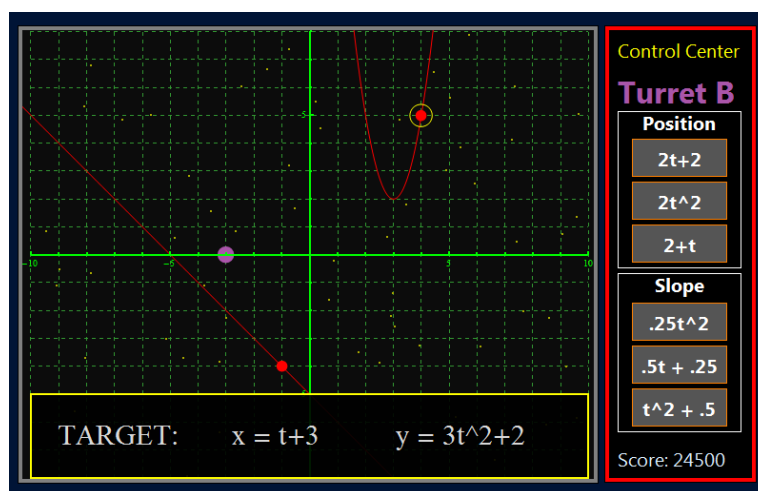


Our game's goal is to teach middle schoolers linear algebra in a fun way. We propose an outer space game where players shoot alien UFOs with lasers. The game will take on a x and y coordinate grid, with the turrets and UFOs placed at coordinates with x and y that are whole numbers. We will present the player with a view of a grid with a UFO and a laser turret and three linear equations. The player will choose one of the three equations and the laser will fire. We anticipate an interface similar to a flash game called "Save Our Dumb Planet."



The player will proceed through successfully more difficult stages. In more difficult stages, we may allow the turret and UFOs to be at coordinates expressed in terms of a third variable, such as t . This way, calculating the line equation for the trajectory of the laser beam may involve polynomial manipulation. Such a stage is pictured below.



Another type of level we're considering is a level where there are 2 or 3 turrets on the graph and lasers from all turrets must hit the target.