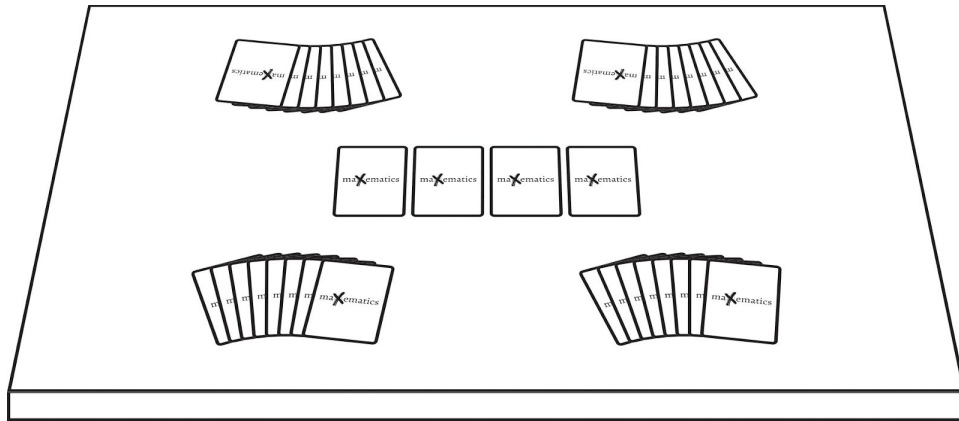# maXematics

by Tom Quinn (thquinn.github.io)

Setup

1. Shuffle the deck of cards.
2. Deal eight cards to each player face down.
3. Place four cards in the center of the table face down. This is a shared pool of cards.
4. Put a 30-second timer or hourglass somewhere all players can reach it.
5. When players are ready, flip **all** cards face up to begin the game.

How to Play

In Maxematics, each player is trying to create the largest number. To do this, you will arrange the cards in front of you to create a chain of operations that, when started off with the number 1, produces a series of numbers that meet each successive card's requirement. You don't need to use all of your cards.
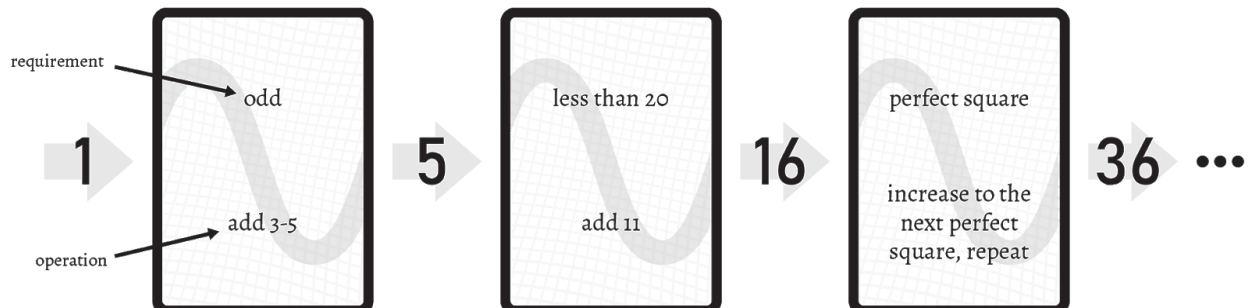
Exchanging Cards

During play, you may put one of your own cards into the pool of shared cards. If you do, take a card from the pool. Remember to put a card into the pool before taking one, to avoid confusion. You should never have more than eight cards in front of you.

Additionally, if you see a card in front of another player that you're interested in, you can propose a trade with that player. If they accept, the trade is executed. Keep in mind, though, that they will probably be busy with their own cards. They have no obligation to pay attention to you!

Ending the Game

When a player is satisfied with their chain of cards, they have the option of triggering the end of the game by starting a 30-second timer. The player that starts the timer may not rearrange their cards, exchange cards with the shared pool, or make trades until the end of the game. **In exchange, that player adds 10 to their final number.**

Counting Up

When the timer runs out, players may no longer touch their cards. In whatever order you like, each player talks through the chain of cards they've laid out, announcing the output of each cards as they go. If a player makes a mistake while explaining their chain, their final number is the last valid output they announced before making the mistake.

If a player uses all eight cards in front of them, they add 20 to their final number. If they were the player that triggered the end of the game, they add 10 to their final number. A player can get both of these bonuses.

The player with the highest final number wins.

Variants

To make for a longer game, use an overarching round or score structure. Feel free to come up with your own variants, and let me know about them!

- First player to win X rounds wins.
- Each player keeps a tally of the sum of their final numbers, first player to reach a total of X wins.