

Adsumudi Instructions

How to Play

OVERVIEW

Find the secret math path to Adsumudi's answer on each card by adding, subtracting, multiplying, and dividing the five other numbers. Keep the cards you figure out first and collect 5 to win!

SETUP

Each player first chooses their own difficulty level for the game. Adsumudi recommends that anyone who hasn't played yet should start off on easy, then gradually move up to medium, then hard, then monstrously hard. Players in the same game don't necessarily have to play at the same difficulty.

Get started by placing the entire stack of cards in the center of the table.

GAME PLAY

At the same time, all players focus on the top card and try to create Adsumudi's answer (the number in the center) using the five other numbers on that card. Numbers can only be used once each in a given equation, but players can use any combination of addition, subtraction, multiplication, and division they need.

If a player is playing on easy, they can use any two or more of the five numbers to make Adsumudi's answer. If on medium, they have to use three or more. If on hard, they have to use any four or more. And if they're playing on monstrously hard, they have to use all five numbers.

For example, pretend that the five numbers on a card are 1, 2, 3, 4, and 5, and Adsumudi's answer is 6. If you're playing on easy, you could come up with $1 + 5$. Or on medium, you could use $4 \times 3 \div 2$. Or on hard, you could use $4 + 3 - 2 + 1$. Or on monstrously hard, you could use $(2 \times 5 \times 3) \div (1 + 4)$.

Actually, all of these would be acceptable ways to make 6 for someone playing on easy since you have to use *at least two numbers* on easy, but you can always use more if you want.

However, you couldn't simply use $2 + 4$ on medium because it doesn't use at least three numbers, and you also couldn't ever use $1 + 1 + 2 + 2$ because it uses numbers more than once.

Once any player finds an equation that works for their difficulty level, they should shout "Adsumudi!" Doing so pauses the game and gives that player a chance to prove that the math works. If it checks out, the player takes the card and keeps it. Everyone then continues playing with the next card on the top of the deck.

If a player's math doesn't check out, there's no penalty. Play continues until someone gets it right. Or if all players agree that a given card is too hard, simply put it at the bottom of the deck and move on to the next card on top.

WINNING

The first player to collect 5 cards wins! Or for a shorter game, play to 3!

PRO TIPS

Tip #1: Work backwards!

New players often try to make Adsumudi's answer by randomly combining the other numbers until they find something that works. But that takes a long time! Instead, try to work backwards from Adsumudi's answer by figuring out what you need to make it. For example, consider a card where Adsumudi's answer is 15 and the other numbers are 10, 2, 13, 6, and 4. Work smart by first picking an arbitrary way to make 15, like 5×3 . Then, instead of looking for ways to make a 15 with all those numbers (hard!), look for ways to make a 5 and a 3 with just some of those numbers (easier!). Like with $10 \div 2$. And $13 - (6 + 4)$. Then you've got your 15 just by multiplying $(10 \div 2) \times (13 - (6 + 4))$. Brilliant!

Tip #2: Make 1's!

Ones are useful mathematical tools! Multiply anything by 1 and you're left with the same thing. Add or subtract 1 from a number to get something else that's close. So try making 1's where you can by dividing a number by itself or subtracting two numbers that are one apart. For example, imagine a card where Adsumudi's answer is 3 and the other numbers are 9, 6, 18, 4, and 14. You can easily make 3 on easy mode with $9 - 6$. But monstrously hard seems, well, monstrously hard! That is, until you realize you can make a 1 with $18 \div (14 + 4)$. Then all you have to do is $(9 - 6) \times (18 \div (14 + 4))$ and suddenly you've wowed all your friends!

Tip #3: Split the deck!

Each card displays 1, 2, or 3 white stars at top. These indicate the card's general difficulty level, where 1 star is the easiest and 3 stars is the hardest. If desired, you can use these to split the deck up for players of different mathematical abilities.

Tip #4: Get hints and solutions!

Stuck on a monstrous card? [Get help here](#). It'll give you step by step hints for any card and even show you full solutions if needed.

MORE WAYS TO PLAY

COLLABORATIVE FRIENDLY!

Instead of competing for each card, players can work together to find solutions. Simply choose easy, medium, hard, or monstrously hard, then see how many cards you can get through as a team!

AROUND THE WORLD REWARDING!

Similar to the Collaborative version, Around the World has players working together to find solutions to all difficulty levels on a given card before moving on. Start by finding the easy solution, then medium, then hard, then monstrously hard. Don't give up and feel free to [grab a hint](#) if you need. It'll be satisfying to get them all!

MINUTE TO WIN IT INCLUSIVE!

Give all players pencil and paper, flip over a card, and start a 1-minute timer (or longer if preferred). Before time runs out, all players write down as many easy, medium, hard, or monstrously hard equations as they can find. When time runs out, players share their answers and get 1 point per number used in a valid equation. For example, if the target is 10 and a player finds 2×5 and $20 - 8 - 2$, she gets 2 points for the first equation and 3 points for the second. Different forms of the same equation don't count, so you can't get points for both 2×5 and 5×2 ! Whoever has the most points in a given round wins the card. After 3 or 5 rounds, whoever has the most cards wins!