



Math Games with Decks of Cards

Tips for playing math card games:

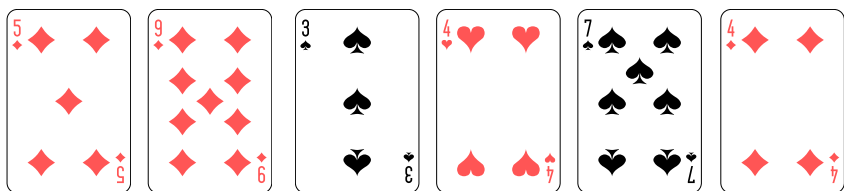
1. You can play with a regular deck of cards. You can assign values to the Ace (1), King (12), Queen (11), Jack (10), and Joker (wild) if you choose to use them. Otherwise, remove prior to playing.
2. If needing 2-digit numbers, add zeros to the cards drawn. For example, 6 x 4 would become 60 x 40.
3. Uno or Phase 10 cards can be used to play any of these games as they have multiples of each card.

PLACE VALUE WAR

Players: 2

Materials: Deck of cards with face cards and 10s removed, Ace worth one

How to Play: Turn over 1, 2, or 3 cards. Place them in any position to make the highest number possible. The higher number wins all of the cards for that turn.



“953 is greater than 744” Player 1 wins all six cards.

Increase the number of cards to flip if you want to work on larger numbers.

GIVE ME 10

Players: 2

Materials: Deck of cards, face cards removed, Ace worth 1.

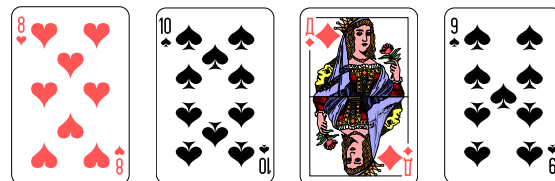
How to Play: Deal 10 cards face up. Players take turns finding and removing combinations of cards that add up to 10. After each turn, deal out new cards so there are always 10 cards face up. To make it challenging, find three cards that add up to a target number (3 numbers that add up to 20).

I SPY

Players: 2

Materials: Deck of cards, face cards worth ten, Ace worth 1 or 11.

How to Play: Deal out the entire deck of cards in a 13 x 4 array. Find two cards next to each other, vertically or horizontally, that add to make a number. Example: “I spy two cards with a sum of 10.” You can also play the game with multiplication, “I spy two cards with a product of 40.”



The other player looks for two cards that multiply to make the sum or product and removes them. After many turns, the array can be reformed to continue play.

SORT IT

Players: 2

Materials: Deck of cards

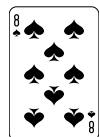
How to Play: Pick a way to sort the cards - even numbers, odd numbers, two cards with a sum of 10, etc. Deal out the deck and players take turns finding cards that fit their sort.

MAKE IT BIG

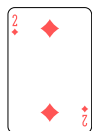
Players: 2

Materials: Deck of cards with the 10s removed, Ace worth 1, scratch paper

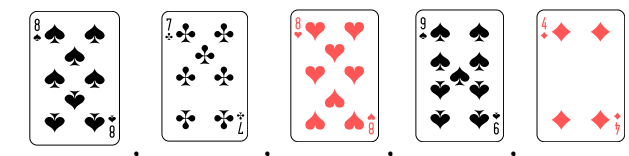
How to Play: Draw a game board like the one shown. Deal 6 cards to each player. Try to create the largest number possible. Only one card can go in the trash. Players must think carefully about where to place a card. Once placed, a card cannot be moved.



Trash Can



Make the game easier by taking higher-digit cards out of the deck or changing the number of cards drawn. Each player flips over one card at a time and decides where to place it to form the largest number possible. All 6 cards must have a place! The player with the largest number wins.



is 97,894

ADDITION OR MULTIPLICATION TOP-IT

Players: 2

Materials: Deck of cards

How to Play: How to Play: Each player turns over two cards and adds or multiplies them together. The player with the greatest sum or product wins all the cards. Continue until all the cards are gone. Make the game harder by playing with 2-digit instead of 1-digit

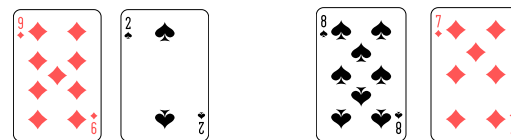
SUBTRACTION TOP-IT

Players: 2

Materials: Deck of cards with face cards and 10s removed, Ace worth one

How to Play: Each player turns over two cards and subtracts the smaller digit from the larger digit. The player with the smallest difference wins all the cards. Continue until all the cards are gone.

Make the game easier by taking higher-digit cards out of the deck. Make the game harder by playing with 2-digit instead of 1-digit subtraction.



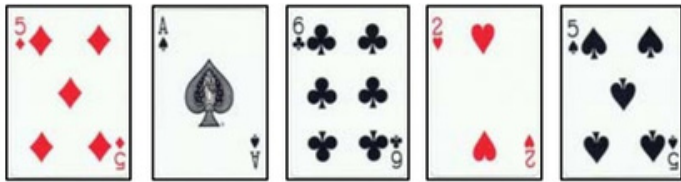
$9 - 2 = 7$ and $8 - 7 = 1$ Player 1 wins all four cards.

HIT THE TARGET

Players: 2 - 5

Materials: Deck of cards, face cards worth ten, Ace worth 1 or 11.

How to Play: Lay out five cards face up. Then choose one additional card to be the target number. You may add, subtract, multiply or divide to hit the target number. Try to use all five cards, but you must use at least 2 cards. The winner takes the cards in the equation, plus the target number. The first player to find a winning combination keeps the cards and chooses the next target number. If no combination is found in about a minute, flip over another card and try to make a combination using six cards.



For example, suppose the target number is 20 and the cards in play are those pictured above. One winning combination might be:

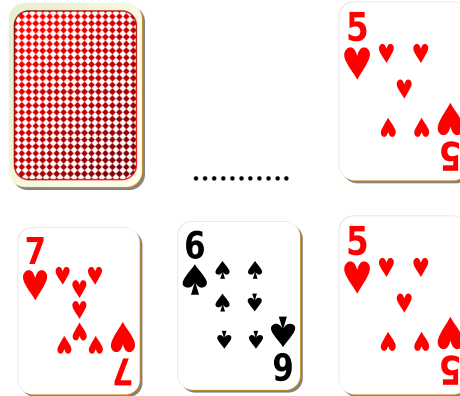
$$\begin{array}{|c|} \hline 5 \\ \hline \text{♦} \text{♦} \text{♦} \\ \hline \text{♦} \text{♦} \\ \hline \end{array} \times \begin{array}{|c|} \hline 2 \\ \hline \text{♥} \\ \hline \text{♥} \\ \hline \end{array} + \begin{array}{|c|} \hline 5 \\ \hline \text{♠} \text{♠} \\ \hline \text{♥} \text{♥} \\ \hline \text{♣} \text{♣} \\ \hline \end{array} + \begin{array}{|c|} \hline 6 \\ \hline \text{♣} \text{♣} \\ \hline \text{♣} \text{♣} \\ \hline \text{♣} \text{♣} \\ \hline \end{array} - \begin{array}{|c|} \hline A \\ \hline \text{♠} \\ \hline \text{♥} \\ \hline \end{array} = 20$$

GREATER OR LESS THAN

Players: 2 - 5

Materials: Deck of cards, Ace through 10

How to Play: Each child gets a set of cards Ace - 10 (for the numbers 1-10). One player selects a 'secret card' from his/her hand and places it face down. The second player tries to guess what the number is by selecting a card from his/her hand and placing it face up. The first player then tells whether the secret card is greater than or less than the face-up card. The second player continues to make guesses by selecting and showing different cards until he/she has discovered the value of the secret card.



1st guess, 2nd guess, 3rd guess. Players then switch roles.

NUMBER BATTLE

Players: 2

Materials: Deck of cards, Ace through 10

How to Play: Deal out the cards to each player until the entire stack of cards is gone. Players each turn over the top number on their stack of cards. The players compare the cards and determine which card has the greatest value. The player with the highest value of the cards collects all of the other cards that are facing up. If the cards have the same value, each player lays their next three cards down and then a new card facing up. The card with the highest value wins all the cards from the round, including the face-down cards.

Variations:

- Turn 2 cards and play with +, -, or x
- Use the face cards as A=11, J= 12, Q=13, K=14
- Turn 3 cards and create a 2-digit - 1-digit equation
- Turn 2 cards and set them up as fractions of exponents
- Use red cards as negative numbers and black cards as positive numbers

PYRAMID

Players: 1-4

Materials: Deck of cards with face cards removed. Ace will stand for one. You will need a deck for each person playing.

How to Play: Arrange the cards into a pyramid with 6 rows for each player, with each row slightly overlapping the previous row. All extra cards can be stacked in a 'draw pile' for later.



Player one begins by looking for two cards that will 'make a 10'. However, they can only remove cards that are completely uncovered. If there is not a card available, they can draw from the "draw pile" until a combination of 10 is found. Player two repeats the step above and takes their turn. Play continues until there are no more moves possible in a player's pyramid. The winner is determined by adding all of the remaining cards. The person with the lowest score is the winner.

READING ADDITION MINDS

Players: 3

Materials: Deck of cards with face cards removed.,
Ace = 1

How to Play: One person is the leader and the other two are the 'mind readers'. The two players (mind readers) each draw a card and, without looking at it, hold it up to their foreheads so that player 3 (leader) can see it, but not themselves. The leader announces the sum of the two cards. The two 'mind readers' figure out which card is on their forehead. A new leader is chosen and play continues. Whoever has the most cards when all cards are gone, wins!

Variation: Play using multiplication instead of addition.



ELEVATOR

Players: 2-4

Materials: Deck of cards, Ace = 1 or 11, J = 12,
Q = 13, K = 14,

How to Play: Each player is dealt four cards face up. The remaining cards are placed in a deck in the center. The aim of the game is to be the first player to arrange the cards in order (going up or down). The cards do not have to be in consecutive order. (1,2,3,4,5,) Just in order (2,5,8,9) Cards cannot be moved, just exchanged. Starting with player 1, each player may exchange one of his/her cards for one from the top of the pile in the middle. The card which is exchanged is placed at the bottom of the deck in the center. Players take turns. The first player to arrange his or her card in order is the winner of that round.

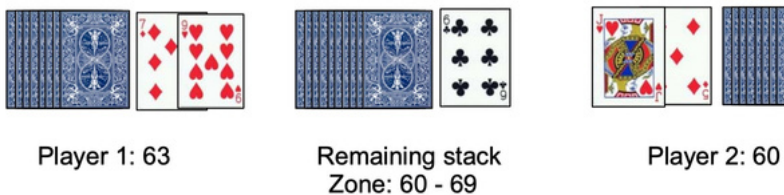
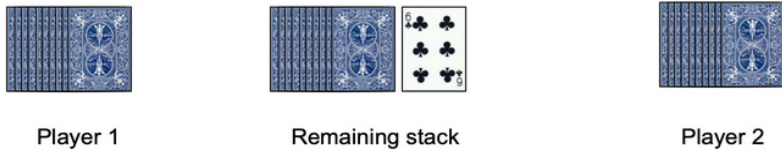


MULTIPLICATION ZONE

Players: 2-4 Players

Materials: Deck of cards, Ace = 11, J = 12, Q= 13, K= 14, Scratch Paper

How to Play: Each player is dealt 10 cards. A card from the remaining stack is flipped face up. The value of the card on the remaining stack is multiplied by 10. Players look through their cards to find two cards with a product that would be in the same decade.



Any player who can make a pair removes those cards from his or her hand. Flip over the next card in the remaining stack to determine the next zone. Play continues until one player's hand is empty.

ADDITION TOSS UP

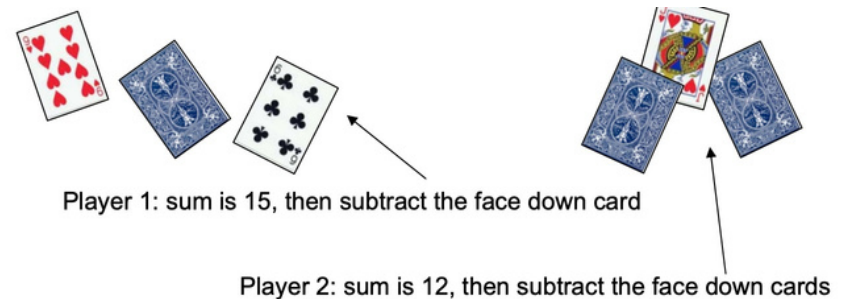
Players: 2-4

Materials: Deck of cards, Ace = 11, J = 12, Q= 13, K= 14, Scratch Paper

How to Play: Each player draws three cards from the deck. On the count of three, each player tosses their cards into the air. Each player adds only their own cards that land face-up. Points are earned for every card that lands face up. The first player to reach a designated amount of points (50 or 100) wins

Variation: After finding the sum of the face-up cards, have players subtract the value of any cards facing down.

This could also be played with multiplication.



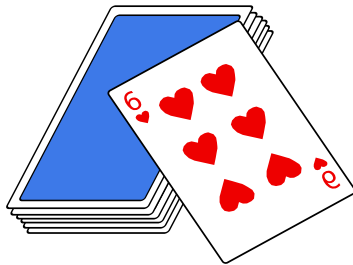
NUMBER MEMORY

Players: 2-4

Materials: Deck of cards, face cards removed.

How to Play: Arrange the cards down in an array that has rows and columns that are the same length. Players take turns turning over a pair of cards. If the numbers match, the player wins the two cards and takes another turn. If the cards do not match, they're flipped face down and the next player has a turn. Play continues until all number matches are found.

Variation: Variations - Each player turns over two cards, finds the sum, and then turns over two more cards and finds their sum. If the sums match, the player gets to keep the cards and takes another turn. If the cards do not match, they're flipped face down and the next player has a turn. Play continues until all number matches are found. Players can also look for products or differences, or odd and even numbers.



MULTIPLICATION -DIVISION SALUTE

Players: 3

Materials: Deck of cards, Ace = 1

How to Play: Divide the cards evenly between the 3 players. Choose who will be the "captain" and "soldiers". Captain says, "salute." Soldiers put one card on their forehead, without looking at their card. The Captain says the product of both cards. Soldiers divide the product by the card number on the other soldier's forehead. Captain lets soldiers know if they are correct. Soldiers keep cards if they are correct. Soldiers give cards to Captain if they are wrong. Then, repeat with a different player as captain.

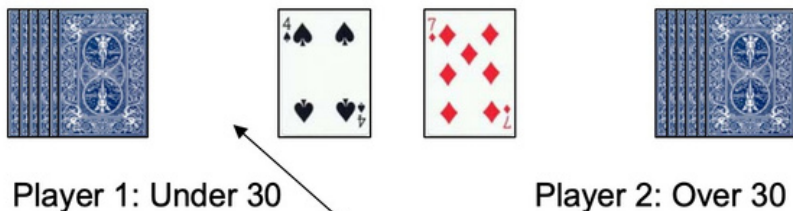


OVER - UNDER

Players: 2-4

Materials: Deck of cards, face cards removed.
Aces worth one.

How to Play: Players split a deck of cards. One player is the Under 30 player and the other is the Over 30 player. Each player turns over a card at the same time and the two numbers are multiplied together. If the product is less than 30, the Under 30 player keeps the cards. If the product is greater than 30, the Over 30 player keeps the cards. If the answer is exactly 30 each player takes back their card and places it back in their deck. When all the cards have been used, the person with the most cards is the winner.



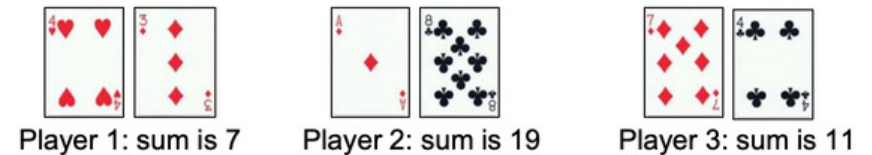
The product is under 30. Player 1 keeps the cards.

FIRST TO FIFTY ADDITION

Players: 2-4

Materials: Deck of cards, Ace = 1 or 11, J = 12, Q = 13, K = 14,

How to Play: Deal two cards to each player. Each player then turns over the two cards they have been given and determines the sum. The player with the greatest sum keeps their two cards while the other cards are returned to the bottom of the deck and new hands are dealt again. Players total the value of the card they have won until one player is the first to fifty.



The greatest sum is 19, so player 2 keeps their cards.

Variation: Play First to 500 using multiplication




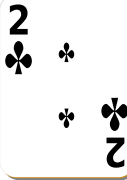
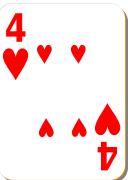


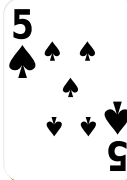


The greatest product is 88, so player 2 keeps their cards.

CLOSE CALL

Players: 1-4

Materials: Deck of cards with face cards removed.
Ace = 1 Jacks = 0

How to Play: Deal 6 cards to each player.
Players select 2 of the 4 cards to create two 2-digit numbers that when added together come as close to 100 as possible, without going over

				Total = 95
				Total = 99

How to Win: The player with the total closest to 100 wins the round and 1 point. In the event of a tie, each player receives a point. After playing 5 rounds, the player with the most points wins.

Variations to the game:

- Play closest to 10
- Subtract to get as close to 0
- Black cards can be positive and red cards are negative

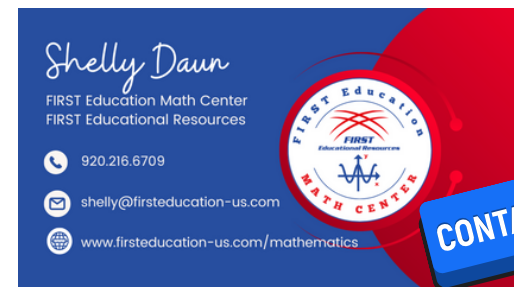
FAST FACTS

Players: 2

Materials: Deck of cards with face cards removed., Ace = 1

How to Play: Deal out half the cards to each player with the cards facing down in a pile. Both players take the card on the top of their pile and lay it face up in the middle. The first player to call out the product of the two cards wins them both. If it is a tie, the cards are left on the table. To break the tie, more cards are turned over and whichever player wins, picks up all the cards in the middle. The winner is the player with the most cards once all the cards have been used.

Variations: You could also use addition or subtraction.



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