

RULES OF THE GAME

CALCUSSIMO

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CALCUSSIMO is a board game that can be played between 2 to 4 people, aged 7 to 97 years. The goal is to create mathematical problems on the CalcuSSIMO board, using numbers and mathematical symbols. Each player will try to get the highest score possible by strategically placing their chips and by using the bonus boxes ($\times 2$) in yellow or green boxes and ($\times 3$) in blue and purple boxes on the board. The final outcome of the game may be important when players are clever.

TO START THE GAME:

Put all the chips in the bag and shake it. Each player will draw a chip and the player who draws the highest number will start the game. Then put all the chips back in the bag and mix again. Each player will then take seven chips to place on their easel.

GAME RULES:

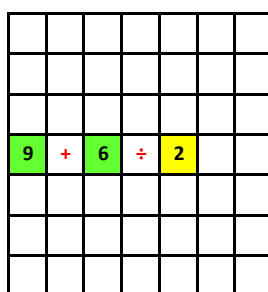
- The first player must create one or more calculations that results in the maximum points possible. The calculations may run horizontally or vertically but tokens must be initially placed on the central location of the game board. Diagonal formulas are not allowed. The points earned for the first calculation will be multiplied by two.
- A turn must not exceed two minutes. After the player announces their total points, no change will be possible. They will then draw the number of chips that they played (in order to keep the 7 chips on their easel).
- The next turn takes place in a clockwise direction. The following players will build upon the chips already placed on the board to form new mathematical computations. Chips that affect those of neighboring rows must result in true mathematical computations. The player will gain points relating to all equations they formed or modified by their arrangements on the board.
- New computations include :
 - adding to a calculation already placed on the board.
 - adding perpendicular chips to a calculation already on the board. This new calculation will use chips already placed in the game and create a new calculation (see steps 2, 3, and 4).
 - having an calculation adjacent to one already played, so that the figures touch and create new calculations.
- The four white chips are JOKERS and can replace any chip except MULTIPLICATION. When using a JOKER, the player must announce its value and it cannot be changed later in the game. The JOKER then takes the value chosen for the purpose of calculating the equation.
- If a player cannot perform a calculation, they can swap one or all of their chips, but will lose their turn. They do so by putting their chips in the bag, mixing everything, and then pulling the same number of chips they have put in.
- All calculations are permitted provided that the end result is a positive integer. The multiplication chip can be used only once in the same sequence of operations in order to limit excessive results. A player may dispute a calculation before the next player's turn. If the calculation is not be allowed, the player takes their chips and passes their turn.
- The game ends when there are no more chips in the bag or when a player has placed all their chips on the board.

CALCULATION RESULTS:

- The total points for each play is the sum of the calculations performed or modified; taking into account the premium squares ($\times 2$) and ($\times 3$). To calculate the mathematical formula, start by multiplication and division, and end with addition or subtraction in the order they are placed from left to right or top to bottom (the Order of Operations).
- Squares ($\times 2$) or ($\times 3$) for the number chips: A green square ($\times 2$) doubles the points of figure occupying it. A blue square ($\times 3$) triples the figure occupying it.
- Multiplication squares ($\times 2$) or ($\times 3$) for the resulting calculations. A yellow square ($\times 2$) doubles the points of the calculation it occupies. A purple square ($\times 3$) triples the points of the calculation it occupies. If an computation has two bonus boxes ($\times 2$) or ($\times 3$), it doubles and triples. The exception is the box with the logo. It counts as an operation ($\times 2$).
- All boxes ($\times 2$) or ($\times 3$) only count once. If they have been used twice, the original value of the chip (the number) is used for the second calculation.
- A JOKER token on a square ($\times 2$) or ($\times 3$) is not doubled or tripled, only when the chip placed on the board has a numerical value.
- When two computations are performed simultaneously during a single round, the points for each transaction are recorded. The total figure is recorded with its points ($\times 2$) or ($\times 3$) once in the most favorable computation.
- The player who manages to place all their tokens on the board at once is allowed to play a second round (picking new chips). At the end of the game, the remaining tokens are reduced by the score of each player by their face value, operation symbols and jokers are worth ten points.

AN EXAMPLE OF PLAYS AND THEIR CORRESPONDING POINTS:

. For the first calculation, we start with the number 2 placed on the box in yellow (the illustrated logo on the game board). Note that the first calculation counts double.



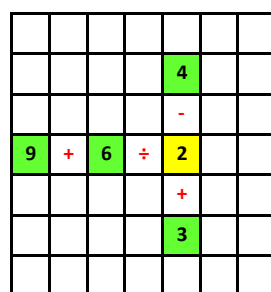
Computation 1 : 48 points

Op 1 : $(6 \times 2) \div 2 = 6$

Op 2 : $6 + (9 \times 2) = 24$

Op 3 : $24 \times 2 = 48$

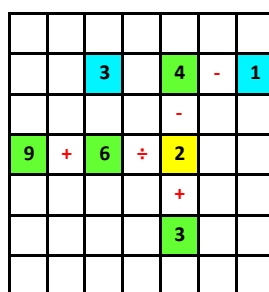
Note: square green = $\times 2$ square blue = $\times 3$



Computation 2 : 12 points

Op 1 : $(4 \times 2) - 2 = 6$

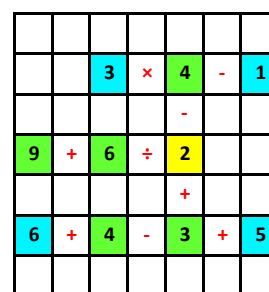
Op 2 : $6 + (3 \times 2) = 12$



Computation 3 : 33 points

Op 1 : $(3 \times 3) \times 4 = 36$

Op 2 : $36 - (1 \times 3) = 33$

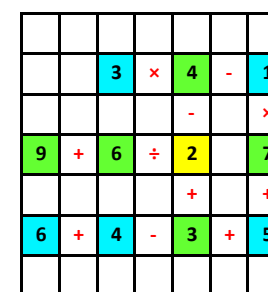


Computation 4 : 38 points

Op 1 : $(6 \times 3) + (4 \times 2) = 26$

Op 2 : $26 - 3 = 23$

Op 3 : $23 + (5 \times 3) = 38$



Computation 5 : 19 points

Op 1 : $1 \times (7 \times 2) = 14$

Op 2 : $14 + 5 = 19$