

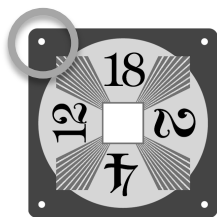


Instructions for SINGLE DIGITS and DOUBLE DIGITS 24® Game Editions

SINGLE DIGITS 96 cards - #33976 | 48 cards - #33956
DOUBLE DIGITS 96 cards - #39976 | 48 cards - #39956

All 24® game cards are printed on both sides, each with a different set of four numbers. SINGLE DIGITS cards have numbers 1 through 9, DOUBLE DIGITS cards have numbers 1 through 24.

Cards are worth 1, 2 or 3 points, rated by difficulty. Look at the corner of a card to tell if it's worth 1 point (1 white dot), 2 points (2 red dots) or 3 points (3 yellow dots). All 9's are "filled in" in red.

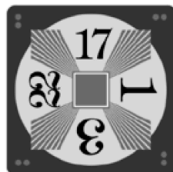


Object is to make 24 with all four numbers on a card. You can add, subtract, multiply and divide. You must use all four numbers, but use each only once.

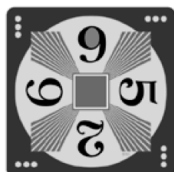
EXAMPLES



$$\begin{aligned} 4 + 8 &= 12 \\ 7 - 5 &= 2 \\ 2 \times 12 &= 24 \end{aligned}$$

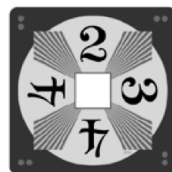


$$\begin{aligned} 22 - 1 &= 21 \\ 21 \div 3 &= 7 \\ 7 + 17 &= 24 \end{aligned}$$



$$\begin{aligned} 5 \times 6 &= 30 \\ 30 \div 2 &= 15 \\ 15 + 9 &= 24 \end{aligned}$$

INCORRECT SOLUTION EXAMPLES



$$\begin{aligned} 2 \div 2 &= 1 \\ 1 \times 3 &= 3 \\ 4 + 4 &= 8 \\ 3 \times 8 &= 24 \end{aligned}$$

Number 2 was used twice. Use each number only once.

$$\begin{aligned} 2 + 4 &= 6 \\ 6 + 6 &= 12 \\ 3 \times 4 &= 12 \\ 12 + 12 &= 24 \end{aligned}$$

Number 6 was used twice. You can use the result of an operation only once, as well.

$$\begin{aligned} 3 \times 4 &= 12 \\ 12 \times 2 &= 24 \end{aligned}$$

Only 3 numbers were used. You must use all 4 numbers.

HOW TO PLAY WITH TWO OR MORE PLAYERS

- Any number of players can play. Count off 12 to 24 cards from the deck (use 1-point cards for an easy start). Stack cards in center of table. All players are playing at the same time, for the top card.
- Win a card by being the first to touch it and give a correct solution. Winner takes the card, and the next card is in play. **For tournament-style play**, you must announce the pattern (last step of your solution; i.e. "3 times 8") within three seconds of touching the card. The complete solution—all three steps—must be completed within 15 seconds. You cannot change the pattern once given, and must complete your solution using that pattern.

If you make a false claim by touching the card but can't quickly give a solution, the card is returned to the deck to be played later.

When players can't find a solution: Every card has at least one solution...some have more. If a card stumps all players, that card can be put aside.

- The winner is the player with the most points after all cards are claimed. Add up the point value of your cards. (Example: If you had four 1 point and three 2 point cards, your score is 10 points.) Begin with 1- and 2-point cards. Add 3-point cards as you improve.

THE SECRET IS TO LOOK FOR PATTERNS

Mathematics is the science and language of patterns. Look for patterns to make 24 and you will excel at the 24 game... and at mathematics. The most common patterns are 3×8 , 4×6 and 2×12 . Other patterns include $15 + 9$, $18 + 6$ and $21 + 3$.

If you see a 3 on the card, try to make an 8 with the other numbers. If you see a 6 on the card, try to make a 4 with the other numbers.



$$\begin{aligned}7 \div 7 &= 1 \\1 + 7 &= 8 \\8 \times 3 &= 24\end{aligned}$$



$$\begin{aligned}5 + 3 &= 8 \\8 \div 2 &= 4 \\4 \times 6 &= 24\end{aligned}$$

SUGGESTED CLASSROOM ACTIVITIES

Some cards have multiple solutions. Play individually or in groups to find as many as possible. If playing in pairs or groups, alternate giving solutions until no more are found.

Each student (or group) lays out six cards on their desk. Choose one person to be the caller. The caller states a pattern to make 24, for example “ $15 + 9$.” If a student has a card that can be solved by that pattern, she may cover that card with a piece of paper. The game continues until one student has covered all six cards on the desk.

Lay nine cards out on the table. Students race to be the first to claim three cards that can be solved by the same pattern. For more challenge, students race to find a pattern that can claim the most cards. New cards can be dealt to replace those taken.

Challenge students to write their answers using the correct order of operations. For example: The card 5, 4, 2, 2 can be solved $5 - 2 = 3$, $4 \times 2 = 8$, $8 \times 3 = 24$. Students must write their answer in one equation: $(5 - 2)(4 \times 2) = 24$.

Strategies—Choose one number on the card and turn the other three into the numbers you need. Example: If you have a 4, try and make a 6, 20, 28 or 96.

Look at the numbers not as four independent numbers, but as two pairs. For example: On the card 8, 7, 5, 4. Pair the 8 & 7 (add) as a 15, and the 5 & 4 (add) as a 9, so $15 + 9 = 24$. Or pair the 7 & 5 (add) as a 12, and the 8 & 4 (divide) as a 2, so $12 \times 2 = 24$.

PATTERNS THAT MAKE THE TARGET NUMBER 24 ON SINGLE AND DOUBLE DIGITS CARDS

6 x 4	8 x 3	12 x 2
24 x 1	24 ÷ 1	48 ÷ 2
72 ÷ 3	96 ÷ 4	120 ÷ 5
144 ÷ 6	192 ÷ 8	12 + 12
13 + 11	14 + 10	15 + 9
16 + 8	17 + 7	18 + 6
19 + 5	20 + 4	21 + 3
22 + 2	23 + 1	24 + 0
25 - 1	26 - 2	27 - 3
28 - 4	29 - 5	30 - 6
31 - 7	32 - 8	33 - 9
34 - 10	35 - 11	36 - 12
39 - 15	40 - 16	42 - 18
44 - 20	45 - 21	46 - 22
48 - 24		

Available through educational dealers, or at 24game.com

Add/Subtract (Age 6+) #31976

Multiply/Divide (Age 8+) #32976

Factors/Multiples (Age 8+ #32977)

Single Digits (Age 9+) #33976

Double Digits (Age 9+) #39976

Variables (Age 9+) #38978

Fractions/Decimals (Age 11+) #34676

Integers (Age 12+) #35576

Algebra/Exponents (Age 12+) #37976

SUNTEX INTERNATIONAL INC.

3311 Fox Hill Rd., Easton, PA 18045 | 610-253-5255 | info@24game.com

© 2015 Suntime International Inc. 24® is a registered trademark.