Quod Help Contents

Quod, a game invented by G. Keith Still, has simple rules, but playing well requires sophisticated strategy. The goal of the game is to place pieces on a grid so that they make a square. The player who makes a square first wins. Squares can be any size and orientation, and players have a limited supply of blocking pieces, which adds to the complexity and interest.

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Game Rules

Quod is played on a 11 x 11 square grid board with the four outer corners missing. Players take turns placing pieces on the board. Each player begins the game with 20 attacking (colored) pieces, and 6 blocking (white) pieces. The object of the game is to out-maneuver your opponent and be the first to outline a square, called a quod, by capturing its four corners with your colored attacking pieces. The blocking pieces are used to block your opponent's squares, but don't count towards making a square of your own.

On each turn you place one attacking piece on the board. Optionally, before placing the attacking piece, you can place any number of blocking pieces, up to the six allotted. If both players run out of attacking pieces before either has made a quod, the player with the most unplayed blocking pieces is declared the winner. If each has the same amount of blocking pieces (or if neither has any), the game is declared a draw.

What is a Quod?

A quod, or a completed square, can be any size and orientation. The diagrams below show all the possible sizes:



Strategy

Every piece you play on the board should have a purpose--either to attack or to block. An attacking move is any move that helps to build a square in your own color. A blocking move is any move that prevents your opponent from building a square. Because of the many possibilities, it's easy to miss potential squares. You'll probably catch yourself cocking your head sideways in an attempt to find them all.

Once you have played your attacking piece your move is over, so be careful to check your position and your opponent's possible squares before playing. This is obvious, but bears repeating because oversights are so deadly and so easy to make.

Don't use "psychological" strategies like hoping your opponent won't notice a potential quod, even if you're running out of blocking pieces. This is risky at best against a human opponent, and hopeless against the computer since the computer never misses a winning square. Always block your opponent's potential squares with either a blocking piece or an attacking piece.

At the beginning of the game there are no quods to make or to block, so you must make your play decisions on a different basis. The center point is always a good first move since from there you can make many potential squares in all directions.

Once the game gets going, try to stay on the attack. When you're not forced to make a defensive move, always play offensively by creating potential squares. If you can't make the third corner of a potential square, make the second corner. Don't waste a turn by making a dead play, placing an attacking piece where it has no possibility of making a square.

Even if you have to make a defensive move, you can stay on the attack. If you have to block your opponent from making a square on his or her next turn and the blocking corner also can make a potential square for you, play an attacking piece on the corner instead of wasting a blocking piece.

You can also use your blocking pieces to move from defensive plays to offensive plays. If you're forced to prevent your opponent from making a square, but playing an attacking piece on the corner does not make a potential square for you, look around and see if you can make a square elsewhere on the board. If you can, block your opponent with a blocking piece and follow by playing the attacking piece where you can potentially make a square.

Since you only have a limited number of blocks, your block and attack strategy has to be carefully timed so you don't run out of blocks later in the game when you might desperately need them. In general it's best not to play blocking pieces too early in the game. Wait until the fourth or fifth turn when you can better see your opponent's strategy and establish your own.

Of course, you are forced into playing a blocking piece if your opponent has cleverly created two (or more) potential squares in one turn. After the first is blocked, the second can be prevented with either another blocking piece or with an attacking piece. The strength of your own potential attack, the number of blocks you have left, and the number of blocks your opponent has left all must be weighed in deciding whether to use another precious blocking piece.

When possible, create two potential squares simultaneously with one piece (a "double square" move). This forces your opponent to make two blocking moves on his or her turn. By playing a lot of double square moves early in the game you can force your opponent to use up his or her blocks.

The "<u>shooting star</u>" pattern is the best method of making double squares and is a very strong play. Conversely, if you see your opponent is attempting to make a shooting star, block the pattern early before too much damage is done to your ration of blocks.

Program Operation

When you launch Quod, you'll see a picture of a Quod board, set up for a new game, with program controls along the right edge. Each player's pieces are stacked on the left edge. You can play Quod in the standard way, one player against another, or test your skills by playing against the computer. Under the label "Against:" you'll see two buttons. Click on the button with a picture of a computer to play against the computer; click on the button with a picture of a person to play against a human opponent. If you choose the computer as your opponent, you get the Red pieces and go first, and the computer gets Blue.

To place an attacking piece, left-click on the vacant circle where you want to put the piece. To play a blocking piece, right-click on the destination position. You can only play blocking pieces at the start of your turn before you play your attacking piece. When you or your opponent makes a square, the computer automatically draws lines connecting the four corners and announces the winner.

Quod keeps a record over sessions of the number of wins for both Red and Blue. You can clear this record back to zero by clicking the Clear button. When playing the computer, the computer helps you see the play it's about to make by "blinking" its piece onto the board. You can control the rate of blinking with the Computer play speed scroll bar found at the bottom of the program options panel. Click the Reset speed button to return the computer speed to its default three-quarters of a second blink rate.

The computer play speed control also varies the time lapse between when a winning quod is outlined and the winner notification dialog box appears. This delay is twice the blink rate. You can quit Quod by either clicking the Quit button or pressing Esc.

Demonstration Game

<u>Part I</u> <u>Part II</u> <u>Part III</u> Part IV

A Message from Quod's Inventor

I developed the game of Quod back in 1979 when I was a student at university. My goal was to develop a quick-to-play but complex game with fewer rules than Go. My friends and I at Robert Gordons Institute of Technology in Aberdeen, Scotland played hundreds of games together. It was as a result of these many trials that I came up with this final version of Quod--the 11x11 board, 6 blocking pieces, etc.

I associate Quod with those carefree times when pressure was an exam and life was one long summer day--and with my friend Graham "Ibrox" Mackenzie, who is no longer with us. He and I spent many lunchtimes playing Quod at the Student Union. He was the master of the "Shooting Star" and shall be fondly remembered.

The original board for Quod was handcrafted from chipboard, and we'd often have disputes about whether a declared quod was really a square. We tried using an L-shaped piece of plastic as a guide, but it didn't always help. We even resorted to elastic bands, but that didn't always help, either. Games could often go the distance only to find that a play had won ages ago. Try playing the game without the benefit of the computer declaring the winner and you'll see what I mean.

In 1980, a technician at the school made me a small clear plastic board on a machine tool. It was perfect; it fit in the pocket and used nice small pieces. At last we had a game we could really play. He said "If it ever makes you a million, buy me a box of Havana cigars." I guess he'll still be waiting, but I'm happy that now, after all these years, others will get the chance to play Quod.

Quod remained in a box in my desk gathering dust until a chance discussion with my doctoral dissertation advisor, Professor Ian Stewart. Ian thought it would make a good article for his regular slot in *Scientific American*. Michael Mefford saw the article in *Scientific American*, and thought a computerized version of Quod would make a good Utilities column for *PC Magazine*. Michael has done a great job with Quod, and I hope you enjoy playing it as much as we did back at university.

"All hail the mudsharks - chip roll."

G. Keith Still May 1996

Shooting Star

The "shooting star" pattern is the best method of making double squares and is a very strong play.



Part I



Move (4) is bad for Blue as it lacks options against the Red (3).

Move (5) opens a good attack on the Blue position--Blue responds with a weak attack at (7). Red defends with (8) and attacks with (9). This opens a double attack at (a) and (b).

Part II



Blue uses two blocking pieces at (1) and (2), and plays (3) to open a double attack. Against the stronger Red position, this is a weak attack as there are no more double attacking points free. Blue should have played his attacking piece at (2) for a double attack.

Red blocks with (5) and (6), and then plays (7). This is a strong move in an open area of the board.

Part III



Blue blocks with (1) and plays at (2), making a potential quod at (3). This is again weak due to the position of Red in that area. Red defends at (3). Blue plays (4) and Red closes a strategic position at (5). Red's move prevents a block-wasting attack by Blue.

Blue plays (6) in hopes of a potential quod at (a).

Part IV



Red blocks at (1) and plays (2). Blue blocks at (3) and plays (4). Red blocks at (5) and plays (6). Blue blocks at (7), creating a potential quod at (8). Red blocks at (8) and plays (9).

Red's move is a double attack which uses the last Blue blocking piece. Blue blocks at (10) and plays (11). Red plays at (12) and wins at (a) or (b) on the next move.